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Financial Performance Analysis before and after Status Change to Regional Public Service Agency of General Hospital dr. Fauziah Bireuen, Indonesia

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Abstract—Financial performance is one of the dimensions measured of the Regional Public Service Agency. This study aims to analyze differences in financial performance in regional of General Hospital dr. Fauziah Bireuen before and after Regional Public Service Agency. This research uses data of budget realization report, income realization report Regional Public Service Agency in 2007-2009 as before Regional Public Service Agency and 2015-2017 as after Regional Public Service Agency. This research uses normality test, paired sample t-test by using SPSS program. Based on normality test results, the data used in this study is normally distributed. From the result of paired sample t test indicating current ratio, receivable billing period and inventory turnover rate it can be concluded that there is no difference in financial performance before and after application RPSA. Meanwhile, cash ratio, fixed asset turnover ratio, ratio of return on fixed assets, and ratio of non-state tax income of operational costs were found to be different before and after the implementation RPSA.

Keywords— Hospital; Financial performance

I. INTRODUCTION

General hospital dr. Fauziah Bireuen is one of regency and accredited hospitals in Aceh Province in Indonesia. This hospital is currently under Regional Public Service Agency (RPSA) in 2010 based on Bireuen Regent's Decree Number 561 of 2009. After obtaining RPSA's status, hospitals are authorized to develop their own budgets set forth in the Decree of the Minister of Health No. 1164 of 2007 concerning the plan of guidelines for the preparation of business budget plans for public service hospitals. The RPSA itself is based on the laws of the Republic of Indonesia Number 1 of 2004.

Status change from General Hospital to Regional Public Service Agency has required the management department of General Hospital dr. Fauziah Bireuen to refer to the Director General of Treasury Regulation (DGTR) Number 34 of 2014. DGTR Number 34 of 2014 stated that the ratios used in measuring the financial performance of RPSA. The financial ratio used to assess RPSA's financial performance is stated in paragraph (1) Director General of Treasury Regulation (DGTR) Number 34 of 2014 letter a, include: cash ratio, current ratio, collecting period, fixed asset turnover (fixed asset turn over), rewards for fixed assets (return on fixed assets), equity rewards (return on equity), inventory turnover, non-tax state income (ntsi), ratio to operational costs. While the use of criteria is good or bad employs Article 8 DGTR Number 34 of 2014. The status change is expected to bring improvements for hospital's performances. This is in line as stated by Bjorvatn (2018) based on a study in Norway that improvements are crucial for hospital's performance. Pasqualini Blass, da Costa, de Lima, and Borges (2017) also point out that it is necessary that to establish measurement for hospital performance in order to obtain preferable quality hospital.

Several studies on the hospital's financial performance have found mixed results under diverse topics. Dong (2015) examined the relationship between hospital quality and financial performance. Lee (2015) explained that government contribution was very important in the direction of a good hospital industry in South Korea. Nicholson-Crotty, Nicholson-Crotty, and Fernandez (2017) found a significant relationship between management and public sector performance in United States of America. Parkitna and Gądek's (2017) research in Japan mentioned that there was a need for a policy and comprehensive reformation in managing hospitals in order to increase hospital's productivity. Younis, Younies, and Okojie (2006), who conducted a research in the United States, claimed that hospital profitability was dependent on many factors such as geographic location, availability, size and price of bedrooms. Meanwhile, another research in the United States by Chen et al (2017) claimed that an existence of gap resulted from two different financial performance measurement.

Several researches also have been conducted in developing countries regarding hospital performance. Bem, Prędkiewicz, Prędkiewicz, and Ucieklak-Jeż (2014) stated that there was no relationship between the size of the hospital and the financial performance of the hospital itself in the Czech Republic. Research in Iran by Mosadeghrad, Jaafaripooyan, and Abbasi (2018)



revealed that hospital performance is determined by various factors such as age, marriage, and education level. However, Pourreza, Mosadeghrad, and Zoleikani (2017) claimed that the status change and accreditation showed negative correlation towards hospital performance.

There have also been several research in Indonesia related to hospitals' performance conducted. Ratnawati (2017), Chrishartoyo, Rahayu, and Zutilisna (2017) found that hospitals that had been changed to RPSA performed differently compared with their performance prior to RPSA. However, Suryaningsih (2017) Fitriana (2018) found that there were variables that were not significantly different after status change to RPSA. But Riawati and Pribadi (2014) said at least with the enactment of RPSA, it has improved bad performance into better and professional. Thus, the purpose of this paper is to analyze the performance of hospitals specifically General Hospital dr. Fauziah Bireuen based on Director General of Treasury Regulation Number 34 of 2014.

Having discussed several researches regarding the analysis of hospital performance, it is clear that hospital performance is influenced by diverse factors. Some empirical studies pointed out that the status change indeed caused improvement in performance. This research analyzes the financial performance of a district hospital after a change of status from a district general hospital to Regional Public Service Agency. It is expected that novel empirical proof about hospital performance after the status change to RPSA will emerge and be beneficial for other hospitals in Indonesia.

II. METHOD

The data used in this study is documentation data from the financial report of General Hospital dr. Fauziah Bireuen before and after obtaining the RPSA status of Bireuen District. General Hospital dr. Fauziah Bireuen financial report data from 2007 to 2009 is the data used pre RPSA status. While the 2015-2017 period data is the report data post RPSA status. The documented data from the research sample period is used to analyze the hospital's financial performance. Financial performance in general hospital applied criteria that have been determined in a particular rule in this case the Decree of Financial Performance Measurement refers to the Regulation of the Director General of Treasury Number 34 of 2014. In the Regional Regulation Number Per-34 / PB / 2014 financial performance criteria have been determined using financial ratios, including: liquidity ratios, activity ratios and profitability ratios. After obtaining all of these ratios, normality test was performed as a test for normal data using the Kolmogorov-Smirnov test. If the data is not normal, then difference test which is applicable is Wilcoxon's non-parametric test. After testing for normality, a different test was carried out in this case the Paired Sample T-Test. If the t value is significant or t <0.05, then it shows that there is a different performance before and after the status change of. General Hospital dr. Fauziah Bireuen to RPSA. Meanwhile, it is insignificant if t> 0.05, then there is no difference in performance at General Hospital dr. Fauziah Bireuen before and after RPSA. In this study, data is tested using SPSS devices.

III. FINDING AND DISCUSSION

A. Test Data Normality

Before conducting a different test before and after the status change from General Hospital dr. Fauziah Bireuen into RPSA, the normality of the data was tested by using the Kolmogorov-Smirnov test. Kolmogorov-Smirnov test results can be studied in Table I below:

Variable Asymp. Sig Value (2-Tailed) Confidence Level Conclusion Cash Ratio 0,998 0,05 Normal Current Ratio 0.854 0.05 Normal Receivable Billing Period 0,05 Normal -1 0,976 0,05 Fixed Asset Turnover Ratio Normal Return on Fixed Assets Ratio 0.894 0,05 Normal Return on Equity Ratios 0,826 0,05 Normal Inventory Turnover Ratio 0,977 0,05 Normal Non-State Income Tax ratio to operational costs 0,766 Normal

TABLE I. NORMALITY TEST

Source: Data from 2018 research results

Based on the normality test (Table I) it can be explained that all data used as performance indicators of General Hospital dr. Fauziah Bireuen have been normally distributed. This can be seen from the value of the confidence level $\leq 5\%$ or 0.05. So, different tests can be done using paired sampled t test (see Table II). As observed from Table II, it can be explained that there are three ratios used to analyze financial performances before and after status change to RPSA of General Hospital dr. Fauziah Bireuen, namely liquidity ratios, activity ratios and profitability ratios. However, the solvency ratio is not assessed because on the grounds that there are no long-term costs or debts at the RSU. First the liquidity ratio consists of cash ratios and current



ratios. Second, the activity ratio consists of the ratio of receivable billing period, fixed asset turnover ratio, and return on fixed assets ratio, inventory turnover ratio and non-state income tax ratio to operating costs. Third, profitability ratios only use the return on equity ratio. Furthermore, from Table II above it is found that out of the eight variables used in this study only five variables, namely cash ratio, fixed asset turnover ratio, return on fixed assets ratio, return on equity ratio and non-state income tax ratio to operational cost, indicated differences in the performance of General Hospital dr. Fauziah Bireuen before and after status change to RPSA. Whereas, for fixed assets, return ratio on equity and non-state income tax ratio to operational costs while current ratio, debt collection period, and inventory turnover ratio shows no change after implementation of RPSA at General Hospital dr. Fauziah Bireuen.

TABLE II. PAIRED SAMPLE T-TEST

| | | Mean | | Criteria | | | |
|-----|---|--------|-------|-------------------|-------------|---------------|---------------|
| No | Variables | Pre | Post | Pre: Post | t-statistic | Sig. Level | Explanation |
| I | Liquidity Ratio | | | | | | |
| 1. | Cash Ratio | 8.46 | 5.06 | Good: Good | 5.22 | 0.05 | Different |
| 2. | Current Ratio | 30.1 | 1.52 | Good: Good | 1.86 | 0.05 | Not Different |
| II | Activity Ratio | | | | | | |
| 1. | Receivable Collection Period | 44.58 | 66.76 | Medium: Good | -1.31 | 0.05 | Not Different |
| 2. | Fixed Asset Turnover | 0.12 | 2.5 | Good: Good | -5.98 | 0.05 | Different |
| 3. | Return on Fixed Assets Ratio | 0.43 | 0.18 | Medium: Good | -20.29 | 0.05 | Different |
| 4. | Inventory Turnover Ratio | 101.84 | 33.4 | Good: Good | 1.73 | 0.05 | Not Different |
| 5. | Non-State Income Tax Ratio to Operational Cost | 0.21 | 1.12 | Medium: Medium | -54.8 | 0.05 | Different |
| III | Profitability Ratio | | | | | | |
| 1. | Return on Equity Ratio | 0.33 | 0.13 | Medium: Good | -10.25 | 0.05 | Different |

Source: research results, 2018

Note: Criteria according to Director General of Treasury Regulation (DGTR) Number 34 of 2014.

On the other hand, based on the indicators above different results emerge. First, liquidity ratios are represented by cash ratios and current ratios with indicators both before and after RPSA are good. However, for the current ratio the indicators show both before and after RPSA is good. This indicates that General Hospital dr. Fauziah Bireuen is capable to meet its short-term obligations both before and after the status change. Next, the receivable collection ratio has different criteria before and after status change where before RPSA the criteria were medium but after RPSA it became good even though it was not statistically different. The ratio of fixed assets has also showed improvement in criteria from medium into good and statistically significant different from before and after RPSA.

Likewise, Non-state income tax ratio to operational costs has changed from medium in before RPSA into good during after RPSA which shows significant differences. Whereas the ratio of Fixed Asset Turnover Ratio and Inventory Turnover Ratio does not differ from the indicator criteria and is still good before and after status change but has been statistically different. Inventory Turnover Ratio is also a good criterion but there is a statistically significant difference. Finally, the Rewards Ratio on the Equity indicates good performance and differences in financial performance before and after RPSA status. Based on the findings above, it shows that the status change has brought General Hospital dr. Fauziah Bireuen towards better improvement.

This is in line with several previous studies conducted by Parkitna and Gądek (2017); Bjorvatn (2018) and Lee (2015) that state that government policies and reforms led to better hospital performance. The same thing was also claimed in research in Indonesia by Ratnawati (2017) and Chrishartoyo et al. (2017) who stated that hospitals that made changes to experienced changes in performance compared to their before RPSA status.

IV. CONCLUSION

This paper is a descriptive study of the financial performance of General Hospital dr. Fauziah Bireuen after changing status from the work unit to the Regional Public Service Agency. The results of the study found that the hospital's liquidity ratio from the cash ratio was different compared with before Regional Public Service Agency status, while the current ratio showed no difference. In addition, there is no difference in the current ratio because the administrative process has changed but there is no change in value. Furthermore, the activity ratio can be explained that the four ratios of activity provide significant differences before RPSA status. Three other ratios do not experience a difference when compared to before RPSA. Finally, the profitability ratio shows profitability difference before and after status change. Therefore, the results of the study indicate that although improvements have not occurred in several indicators before and after the hospital status change, but in general the others indicators have shown improvements towards a positive direction.



This research brings out some implications for the hospital management as well as for the community as the users of its services. The management is suggested to take wiser decision regarding financial policy in order to maximize financial performance. Meanwhile, for the community also possess the right to receive better services from healthy hospital business practices. Nevertheless, this research has limitation that it only focused on measuring financial performance to assess hospital performance and restricted to hospital that experienced status change to RPSA. Further research should apply more comprehensive approach such as balance score card method.

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