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DIVESTITURE AND COMPANY'S FINANCIAL PERFORMANCE: AN EMPIRICAL STUDY ON COMPANIES LISTED ON INDONESIA STOCK EXCHANGE

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***Abstract*—In an uncertain business environment, most of the companies will do some actions to optimize their performance such as merger & acquisition, where this action commonly followed by divestiture. Previous studies have shown diverse impacts from divestiture. In this study, the sample used were companies listed in Indonesia Stock Exchange in 2009-2018 who did a divestiture action. A non-parametric Wilcoxon Signed Rank test was used in comparing companies' financial ratio such as TATO, Cash Ratio, M/B Ratio, Net Profit Margin on Sales, ROA, ROE, and P/E Ratio. From this study, TATO, ROA, Net Profit Margin to Sales, and P/E Ratio from pre until post divestiture were different, but it weren't for Cash Ratio, M/B Ratio and ROE.**

***Keywords*—Merger & Acquisition, Divestiture, non-parametric test, Wilcoxon Signed Rank test, financial ratio.**

I. INTRODUCTION

Divestiture is one of the important aspects that can be done by company in adjusting its portfolio with the market's uncertainty. Thus, divestiture is an important aspect that should be studied futhermore specifically on it's impact to company's financial performance. As said by Dimitri & Sumani (2004), the decision of the divestment will be carried out by top managers who must determine decisions regarding investment, dividends, and also financing. Previous researches showed that the impact of divestiture to the company's financial performance had different outcomes. As the research done by Cho & Cohen (1997) who saw the differences in companies' operating cash flows, they found that there weren't any significant differences in companies' operating cash flows after divestiture.

This was opposed to the research by Hanson & Song (2003) where divestiture was found to increase company's performance when it was carried out on asset which caused a negative synergy to the company. The result was different on divestiture aimed to increase equity, in which it didn't affect the company's financial performance. On the research done by Lang, Poulsen & Stultz (1994), they found that divestiture didn't give a positive impact on company's financial performance, except for divestitures done by companies who had planned to share the benefits from the divestiture to the entitled parties. Along with those, there were also researches done by Capron (1999) who found that divestiture had an impact on acquisition performance and also Capron, Mitchell & Swaminathan (2001) who found that the impact of divestiture only affected the company who received the resources as the result of the divestiture action.

This paper focuses on analyzing the impact of divestiture based on the motives of divestiture where a comparability study was done on pre and post divestiture companies' financial performance and the sample included were companies listed on Indonesia Stock Exchange in 2009-2018.

II. LITERATURE REVIEW

Based on Gole & Hilger (2008:3) divestiture that was done by company in merger & acquisition, involves sales from shares or asset belongs to business units which are different in size, starting from specific small business unit like individual product or a product line, to a big business unit like a division or subsidiary. Gole & Hilger (2008:3) also differentiate this activity into 4 main categories which are based on the motives of divestiture. These 4 categories are:

1. Sale of a well-performing but non-strategic unit (non-strategic unit).
2. Sale of an underperforming unit that is diluting consolidated growth and profitability (underperforming unit).
3. Sale of a profitable unit to raise cash (raise cash).
4. Sale of a unit perceived by the market to cause undervaluation of the seller's entire enterprise (unit perceived to cause undervaluation).

In this research, company's financial performance was measured using company's financial ratio where these ratios can be divided into 5 categories based on the theory from Ross, Westerfield, Jordan, Lim, & Tan

(2016:57-67). These 5 categories are Liquidity Ratio, Financial Leverage Ratio, Turnover Ratio, Profitability Ratio, Market Value Ratio. The parameters of the company's financial ratio are based on the 4 motives of divestiture by Gole & Hilger (2008). From those 4 motives, there were some company's financial ratio that can be chosen as parameters of divestiture's impact on company's financial performance. On divestiture held on underperforming unit, company did this to prevent the dilution consolidated growth and profitability of the investment on that unit. So the suitable ratio to measure this impact is total asset turnover, where this ratio is used to measure the effectiveness from the fund allocated to company's asset.

For divestiture with the objective to raise cash, this action was done to increase company's cash, so that the suitable ratio to measure this is cash ratio which can measure company's capabilities to fulfill their short-term liabilities with only using their cash. On the divestiture held on unit perceived to cause undervaluation, the main objective is to fix the market valuation on the entire enterprise so that it won't affect badly to the shareholders chiefly on the company's share price. The ratio suitable for this category of divestiture is market to book ratio which can represent the valuation information of the market to the management.

Apart from those 4 motives of divestiture, all of the impacts of divestiture also can be measured from the profitability ratio to see the company's profitability and returns from company's operational performance. The price to earnings ratio can also be used to represent the comparison between company's share price and company's earnings per share to determine its performance.

From the previous studies, most of the researches were more into share price comparison or more into the company's abnormal return on pre to post divestiture's announcement. As the study done by Wright & Ferris (1997), where they investigated the impact of divestiture announcement to company's stock return behavior rate in South African Companies with the principal-agent relationship context. The measurement was done based on the Capital Asset Pricing Model (CAPM) using the data from 10 days pre and post divestiture announcement. From this study, they found that divestiture announcement in South African Company can caused to a negative excess return in company's share price.

There was also a study held by Montgomery, Thomas, & Kamath (1984) where they discuss about divestiture, market valuation, and divestiture strategies. In this study, they examine the relationship between Cumulative Abnormal Returns (CARs) and company's divestitures motives. The results from this study were from the 5 categories included in this study, there were 2 categories which had shown a significant difference in the abnormal return rate. These 2 categories were the divestiture that was carried out on strategic objectives which had shown a positive impact, and a divestiture that was carried out on an unwanted asset which had caused a negative impact.

Differ from those 2 studies, on the research done by Hanson & Song (2003), they inspected the company's long-term performance who has done divestiture to determine the benefit from the agency cost reduction. This study measured the mean and median from the Abnormal Holding Period Returns (BHAR), Excess Market to Book Ratio (M/B), and Excess ratio of Operating Cash Flow before Depreciation to Total Asset (EBITD/TA). It was found that divestiture had a more significant impact on EBITD/TA than on the market-to-book ratio or BHAR. It was also found that company who did this action had shown an increased performance and also had produced more benefit for the shareholders from the divestiture announcement.

Another study was also done by Cho & Cohen (1997) who investigated the differences in company's *operating cash flow*. The results shown that the pre period and during the divestiture period had shown a decreased performance, where it also had shown an increased on the post divestiture performance but it wasn't significant. On the study held by Brauer & Schimmer (2010) about the effect of divestiture program on company's performance, they studied the abnormal return of 160 divestitures on 1998-2007 globally on the insurance companies. In this study, they found that a programmed divestiture or a group divestiture had shown a higher abnormal return than a single divestiture.

III. RESEARCH MODEL

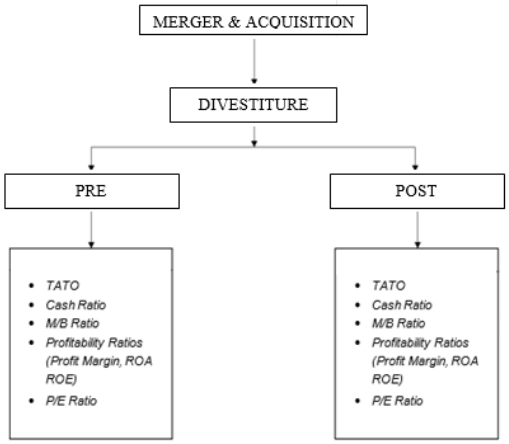

Fig. 1. Research Model

Based on the connection of divestiture motives with company's financial ratios as already described, the research model of this study can be shown as the figure 1 above. An analysis of company's financial

performance on pre and post divestiture using the financial ratios were held using the following hypothesis:

H1: Divestiture affects company's Total Asset Turnover Ratio.

H2: Divestiture affects company's Cash Ratio.

H3: Divestiture affects company's Market to Book Ratio.

H4: Divestiture affects company's Profit Margin Ratio.

H5: Divestiture affects company's Return on Total Asset Ratio.

H6: Divestiture affects company's Return on Equity Ratio.

H7: Divestiture affects company's Price to Earnings Ratio.

IV. METHODS

In this research, variable used were company's financial ratios which are Total Asset Turnover (TATO), Cash Ratio, Market to Book Ratio (M/B Ratio), Profit Margin, Return on Total Assets (ROA), Return on Equity (ROE) and Price to Earnings Ratio (P/E Ratio). The population of this research includes companies listed on Indonesia Stock Exchange on 2009-2018. The sample used were companies who did divestiture on 2010-2017, where the data used were the companies' financial ratios which were obtained from the company annual reports and audited financial reports at the maximum of 1 year before and after the divestiture. The collection of the data was using a purposive sampling method by sorting on the public companies listed on the Indonesia Stock Exchange (IDX) on 2009-2018. From those data, the sample were collected from the public information disclosure regarding divestiture on the year 2010-2017. From this process, this study included a total of 12 samples with the informations obtained from IDX, The Indonesia Capital Market Institute (TICMI), Otoritas Jasa Keuangan (OJK) and also from another news sources and companies' official websites.

A. Descriptive Analysis

From those financial ratio data, it will be analyzed using a descriptive analysis and a statistic descriptive analysis, where the statistic data used were means and standard of Total Asset Turnover (TATO), Cash Ratio, Market to Book Ratio (M/B Ratio), Profit Margin on Sales, Return on Total Asset (ROA), Return on Equity (ROE), and Price to Earnings Ratio (P/E Ratio).

B. Statistic Testing

From the data obtained, it will be tested statistically to assess the qualification of the data using the normality test. Then it will be tested hypothetically, where if the data is normal, then it will be tested further using a parametric test and if the data used is not normal, then it will be tested using a non-parametric test. Normality test is used to prove whether the data tested has a normal distribution or not.

This normality test can be done using the Kolmogorov-Smirnov test and the Shapiro-Wilk test. The conclusion of these test can be obtained by comparing the Sig. value (p-value) and the level of error (α) used, where in this study, the level of error used was 5%. Ho in this study is the data used is normally distributed and Ha used in this study is the data obtained is not normally distributed. If the Sig. value (p-value) > α, then the conclusions taken are Ho accepted and Ha rejected, and it also applies where if Sig. value (p-value) < α, then the conclusions taken are reject Ho and accept Ha. In this normality test, if the data obtained was normally distributed, then the test will be followed by a parametric test, by using a Paired Sample T-Test. But if the data obtained was not normally distributed, then the test will be followed by a non-parametric test which is a Wilcoxon Signed Rank Test.

After the normality test had been done, the test will continue by using either a parametric or a non-parametric test to evaluate the comparison of the two samples obtained to see whether or not there are significant changes in the data. Both of the parametric and the non-parametric test has the same hypothesis as follow:

H0: There are no significant changes on the TATO, Cash Ratio, M/B Ratio, Profit Margin on Sales, ROA, ROE, dan P/E ratio from pre until post divestiture.

Ha: There are significant changes on the TATO, Cash Ratio, M/B Ratio, Profit Margin on Sales, ROA, ROE, dan P/E ratio from pre until post divestiture.

The testing of these hypothesis will be done by comparing the p-value of the data with the level of error in this study which is 10%. If the p-value > α, then the Ho will be accepted and the Ha will be rejected. nevertheless, if the p-value < α, then the Ho will be rejected and the Ha will be accepted.

V. RESULTS AND DISCUSSION

From the total of 613 companies listed in the Indonesia Stock Exchange at the year 2009-2018, the sample chose were companies who gave an information disclosure to the public in divestiture actions taken through the Indonesia Stock Exchange and Otoritas Jasa Keuangan (OJK) in the year of 2010-2017. From the data obtained, there were a total sample of 12 companies who did a divestiture actions from the year 2010 until 2017.

TABLE 1. STATISTIC DESCRIPTIVE ANALYSIS OF COMPANIES' FINANCIAL RATIO.

Descriptive Statistics					
	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
ATO_Bf	12	0.000	2.231	.40345	.661335
TATO_Af	12	0.000	2.718	.51317	.749567
Cash_Bf	12	0.000	.682	.10585	.194852
Cash_Af	12	0.000	4.832	.53823	1.364413
MB_Bf	12	-3.939	9.717	1.24016	3.132887
MB_Af	12	-.508	5.232	1.55506	1.804853
NPM_Bf	12	-74.187	.199	-6.51704	21.321754
NPM_Af	12	-.189	33.269	2.83400	9.586161
ROA_Bf	12	-.134	.122	-.02629	.068770
ROA_Af	12	-.015	.257	.03975	.085175
ROE_Bf	12	-1.534	3.243	.07410	1.101949
ROE_Af	12	-.119	.685	.07879	.206965
PE_Bf	12	-63.688	16.375	-7.20978	25.242245
PE_AF	12	-20.384	371.429	56.65895	107.114371
Valid N (listwise)	12				

Source: SPSS Output

Bf: 1 year before Divestiture
Af: 1 year after divestiture

Based on the data above, it shows that divestiture action has given positive impacts on companies' financial ratio. These impacts can be seen from all of the means of the companies' financial ratio where there was an increasing pattern from the pre until post divestiture period. So it can be concluded that divestiture action can give positive impacts or improvements in the companies' financial ratio.

TABLE 2. NORMALITY TEST RESULTS

Tests of Normality						
	Kolmogorov-Smirnov[a]			**Shapiro-Wilk**		
	Statistic	**Df**	**Sig.**	**Statistic**	**df**	**Sig.**
TATO_Bf	.305	12	.003	.670	12	.000
TATO_Af	.289	12	.007	.664	12	.000
Cash_Bf	.293	12	.005	.599	12	.000
Cash_Af	.411	12	.000	.433	12	.000
MB_Bf	.263	12	.022	.783	12	.006
MB_Af	.201	12	.197	.861	12	.050
NPM_Bf	.499	12	.000	.351	12	.000
NPM_Af	.515	12	.000	.343	12	.000
ROA_BF	.102	12	.200*	.975	12	.959
ROA_Af	.407	12	.000	.619	12	.000
ROE_Bf	.387	12	.000	.682	12	.001
ROE_Af	.316	12	.002	.655	12	.000
PE_Bf	.326	12	.001	.760	12	.003
PE_Af	.333	12	.001	.623	12	.000
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

Source: SPSS Output

Bf: 1 year before Divestiture
Af: 1 year after Divestiture

Based on the results of the normality test, it show that the data used were not normally distributed. This result can be seen from almost all of the data which has a Sig. value (p-value) < 0,05 so the data can be stated not normally distributed. So the test will be followed by using the non-parametric test which is the Wilcoxon Signed Rank Test.

TABLE 3. RESULTS OF WILCOXON SIGNED RANK TEST

NO.	FINANCIAL RATIO	Sig.	CONCLUSION
1.	Total Asset Turnover (TATO)	0.033	**Reject Ho**
2.	Cash Ratio	0.424	Accept Ho
3.	Market to Book Ratio (M/B Ratio)	0.155	Accept Ho
4.	Net Profit Margin to Sales	0.050	**Reject Ho**
5.	Return on Asset (ROA)	0.008	**Reject Ho**
6.	Return on Equity (ROE)	0.182	Accept Ho
7.	Price to Earnings Ratio (P/E Ratio)	0.013	**Reject Ho**

Source: SPSS Output

From the *Wilcoxon Signed Rank Test* above, can be seen that *Cash Ratio, Market to Book Ratio* (M/B *Ratio*), and *Return on Equity* didn't show significant changes to the companies' financial performance related to those ratios. Diversely, *Total Asset Turnover* (TATO), *Net Profit Margin on Sales, Return on Asset*, and *Price to Earnings Ratio* show significant changes to the companies' financial performances from the divestiture action.

From the results above, companies' financial ratio which show significant changes were ratio related to companies' asset, profit, and sales. This is corresponding to the divestiture motives by Gole & Hilger (2008:3). If connected to previous studies, this

research shows positive impacts from divestiture action, so this research is not in line with the research done by Wright & Ferris (1997) who showed negative impacts or return from divestiture. If observed by the financial ratio, this study is corresponding to the study done by Montgomery, Thomas, & Kamath (1984) where they found that divestiture which was done with the motive of liquidity didn't give a significant result. Where in this study cash ratio which was the parameter of the divestiture done with a motive to increase company's cash level (liquidity) also didn't show a significant result. In the study done by Hanson & Song (2003), EBITD/TA had a more significant impact than M/B *Ratio*, so this result also corresponds to this research's results where it was found that TATO and ROA show significant results but M/B didn't show a significant result.

VI. Conclusion

Compared to previous research, the results obtained from this study show positive results of corporate performance improvement, so that it is different from the results of research conducted by Wright & Ferris (1997) which shows a negative return, and also from research conducted by Montgomery, Thomas, & Kamath (1984) which shows that divestiture of unwanted units has a negative impact.

Whereas when viewed in terms of financial ratios, it can be seen that the results of this study are in line with the results of research conducted by Montgomery, Thomas, & Kamath (1984) where they found that divestiture motives based on liquidity did not show significant results, which in this study, The cash ratio which is the benchmark for the divestiture motive to get liquidity also shows insignificant results. In a study conducted by Hanson & Song (2003), TATO factors have a very significant effect compared to M/ B ratio so this is also in line with the results of this study which found significant differences in TATO and ROA ratios while no differences were found which is significant at M/B Ratio.

Based on the results of this research, the conclusion that can be obtained were TATO, Net Profit Margin to Sales, ROA, and P/E Ratio show significant changes from the pre until post divestiture, contrarily, Cash Ratio, Market to Book Ratio (M/B Ratio), and Return on Equity (ROE) didn't show significant changes form the pre until post divestiture. From all of this research, divestiture action can be recommended to be done by companies. This recommendation was based on this research's results which show that there was an increasing pattern on the companies' financial performances from the pre until post divestiture. In the implication for the companies' management, this divestiture action can be done by companies who wants to eliminate their non-strategic asset and their underperforming asset. This implication is supported by this research's results which show more significant impacts on companies' financial performances related to asset, profit, and sales of the company.

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