Merger and Acquisition Analyses Toward the Financial Performance of Manufacturing Companies That Listed at Indonesian Stock Exchange

Hermanto
Universitas Al-Amin Sorong

Abstract: They made a number of suggestions to improve strategic management education and research, upon which this special issue of the International Journal of Business seeks to build. Scholars are confronted by issues such as government supported firms, social and economic effects of climate change, nanotechnology, internet based piracy, shifting societal values, and disruption of business by terrorism. Associated with changing problems of commerce is a need to develop more comprehensive and realistic measures of organizational performance. While some researchers have made progress in measuring return 'real' risk adjusted to shareholder, others are focused on return to a variety of stakeholder and are developing broader performance criteria. For example, some firms are progressing toward reducing their 'ecological footprints', and others have an aim of becoming "carbon neutral". They are attempting to satisfy stakeholder who wish to minimize an "intergenerational conflict" if the current generation of adults were to leave their children a "greenhouse gas legacy" that would be very costly to remedy (Grant, 2006; Holmén, 2006; Stead and Stead, 2004). As consequences of corporate activities for the broader society become increasingly understood, researcher are quantifying key construct and analyzing them in ways which take us closer to valid measures of comprehensive strategic performance. This article provide information for those seeking to improve strategic performance while accounting for impacts upon multiple levels and sectors of society.

Keywords: merges, acquisition, finance and business.

The research investigation is to conduct research development from previous research with subject of Analysis of Manufacturing Financial Performance that Merged and Acquired in Indonesia (Study at Manufacturing Companies that Listed at Jakarta Stock Exchange) and still considered the main discussion about theoretical investigation that related with conceptualization and merger and acquisition strategy usage from financial management point of view. The essence of the discussion is whether the merger and acquisition strategies each stand alone or whether both strategy can be used simultaneously. It has been stated that efficiency and differentiation in general is not suitable (Dees and Davis, 1983, 1984; Hambrick, 1983; Nayyar, 1993; Parker and Helms, 1992; Porter 1980, 1983; Reitperger, et al., 1993). Because of that, for higher financial performance, both strategies can be used simultaneously (Buzzell and Gale, 1987; Buzzell and Wicedema, 1981; Gupta, 1995; Hall, 1983; Hill, 1988; Jones and Butler, 1988; Miller and Friessen, 1986a; Murray, 1988; Phillips, et al., 1983; Sloecom et al, 1994; White, 1986; Wright, 1987). Because of that, improvement of innovation able to improve differentiation at company. And financial performance quality that is better possibly able to improve the market demand become higher to competing companies that use differentiation strategy.

The rapid development that occurred at positivistic approach in arranging financial theories that encourage the financial studies that connect financial ratio with certain financial phenomenon, with hope it can be found various objective usage of financial ratio to predict companies bankruptcy (Winakor and Smith, 1987).
company that give greater values if compared with each value amount if stand alone. Synergy can be reached through four condition: operating economies, financial economies, differential efficiency and increased market power, operating economies produced from economic scale, that is the same activities from two companies that done together and produced lower per unit cost. Financial economies occurred during merger of two companies produced lower financial load.

Then the writer interested to analyze whether the companies that do merger and acquisition experience improvement compared than before?

Business combination is one of strategies to maintain the survival and company development. Indonesian Accountant Association in the Financial Accounting Standard Statement No 12 (PSAK No.22) defined the company merger as form of two or more separated companies combination become one economic entity because one company that unify with other company or obtain control for asset and operation of the other companies. The business combination can be in the form of merger, acquisition, or consolidation.

Merger, is combination of two or more companies where one company still live and the other liquidated. Asset and liabilities of the liquidated company taken over by the surviving company. The surviving company should in the form of limited company.

According to Komarduddin (1994:564) in management encyclopedia defined merger: “combination of two or more a type companies become single company so one absorb the others”

While according to Fuady (1999:2) the merger term as “fusion” or “absorption” of things or right to other thing or right. Wo company merger means two companies do fusion, where one of them will disappear (or liquidated). Other factors: production, accounting and financial, tax, legal, marketing, and human resources factors.

Acquisition, acquisition often be considered as investment at subsidiary company, that is mastery of majority stock of other company, so created a parent holding company-subsidiary company relationship. The company whose the stock mastered by other company will still intact as one business unit and as
autonomous corporate. So two or more companies that join still exist as one business.

International Accounting Standard Committee (IASC) through International Accounting Standard (IAS) No. 22 (IASC, 1995a) defined acquisition as "business combination where a company, the taking over company, get control for net asset and operation of other company that taken through asset exchange, long term liabilities, or share capital."

According to Fundy (2001:3-4), the acquisition term in the hokum and business fields each hokum action to take all or most part of stock or asset of other company. If the take over is share, then with the acquisition then the control of the target company also shifting. Categorizing acquisition become five: business type, localization side, motivation side, divestiture side.

One of main factor of acquisition success is mature acquisition preparation, either the acquirer or the target acquiree. Because of that, if there is sudden offer avoid to make acquisition bring loss for the target company. John H Dunning in Fundy (2001:43-42) showed six criteria that should be considered to make acquisition success, that is: reduce transactional cost, avoid the lack of gain because of control loss. Still control to supply input, facing governmental intervention well, protect right and ownership, optimizing existing capacity.

The merger and acquisition goal, merger and acquisition aimed at improving company synergy. The synergy addition from merger and acquisition called as gain. Because the presence of positive value then merger can be one of ways to remedy the sick companies. So with the reason companies that need remedy become big rapidly. Fuady (1999:51-52).

According to Fuady (1999:54-55) the synergy addition because of merger and acquisition is caused by the presence of some benefits from merger and acquisition, that is as follows: market consideration, distribution saving, diversification, manufacturing benefit, research and development, financial consideration, excess capital usage, human resource consideration, sophisticated and automation.

Company financial performance valuation. The financial performance valuation of company aimed at assessing the company success as business body. In the researches that are related with performance valuation in general the researcher chose production of company performance based on consideration 1) the previous similar research results 2) using measurement rod that has been determined by the authorized agency, 3) prevalence in practice, 4) floating measurement model through testing statistically first to choose the appropriate measurement rod with the research goals.

Merger and acquisition that done by bidder is expected able to give synergy for company so able to improve the working capital to fulfill the short term liabilities. It is occurred after company unified with the target company that is reflected in the current ratio and leverage ratio. And also with the company operation activities that tend to increase after merger and acquisition with operating profit margin ratio.

When a company take over other company at certain price that exceed its asset fair value, then there is goodwill. According to Walsh (2003:295) the goodwill amount will not emerge either in the financial report of buyer or seller or vendor, but it is attached in the consolidation report or combination report of both company. In various ratio, the calculation only be done for tangible asset, not included goodwill. Yet, goodwill still has important influence toward the financial position that is reported by company and because of that, the understanding for the origin and its treatment also considered as important.

Merger and acquisition able to give impacts to the stock performance and the company financial characteristic, either the acquirer or the target company. According to Rahmawati (2000:78) the stock price change of both company showed the welfare structure amount that obtained by shareholder as impact of the merger and acquisition announcement. While the welfare structure of shareholder measured from the abnormal return amount that is obtained by shareholder of acquirer or the target company.

Limmack (1991:239-251) studied the influence of merger to the welfare structure of shareholder by considering the income distribution of shareholder of the participating companies. The results showed that although totally no decrease for the welfare structure of shareholder as results of the take over, then the shareholder of bidder company experience the welfare structure decrease. In contrary, the shareholder
at the target company obtain the significant welfare structure.

Parkinson and Dobbins (1993:501–519) researched about abnormal return that obtained by shareholder from company that involved in the hostile bid. Results showed that considerably the positive abnormal return obtained in 24 month period after bidding. The stock price of the company increase dramatically during the acquisition announcement and the acquisition process either shareholder of bidder or target company obtain profit.

The earliest research about the objective usage of financial ratio, so far that can be traced by the writer, done by Winakor and Smith (1930). Winakor and Smith analyzed 21 financial ratio for 10 years to determine which financial ratio that is most accurate and useful as indicator 10 years before bankruptcy. Winakor and Smith concluded that the most accurate and useful financial ratio as bankruptcy indicator is Net Working Capital to Total Asset. The weakness of Winakor and Smith study was they did not use control group in the form of non bankrupt companies (Zainuddin and Hartono, 1999).

The similar research that included control group in the form of success companies done by Altman (1968). Altman used samples of 66 companies, that consist of 33 bankrupt companies and 33 non bankrupt companies. By using multivariate discriminant analysis, Altman found that financial ratios, liquidity, solvency, and profitability that is useful in predicting the company bankruptcy of company with the decreasing accuracy along with the longer predicting period. At prediction period of one year before the company bankrupt, the financial ratio is useful to predict the bankruptcy with 93% accuracy that decrease become 76% at two years period before bankrupt, 48% for 3 years period, 29% for four years period, and increase again 36% for five years period before the bankruptcy. Sinkey (1978) conducted research about financial ratio usage in predicting financial condition of banking company. By using multiple discriminant analysis in testing the bank under troubled, Sinkey analyzed 10 financial ratio in testing sample of 110 banking companies. In the research, Sinkey obtained evidences that the useful financial ratio as predictor of financial condition of banking company significantly different between bank under trouble with good bank for prediction period of 4 years before bankruptcy.

The financial ratio in predicting bankruptcy also done by Dambolena and Khoury (1980). Dambolena and Khoury used retail companies and manufacturing companies as the research samples, 46 companies that consisted of 23 bankrupt companies and 23 non bankrupt companies. By using discriminant procedure, Dambolena and Khoury analyzed 19 financial ratios and found that the financial ratio have ability to be used as bankruptcy predictor of retail and manufacturing companies for five years before the company go bankrupt.

O’Conner (1973) conducted research to test financial ratio ability in predicting stock profit by using of 127 companies. By using univariate and multivariate analysis, O’Conner tested 10 financial ratios and showed that financial ratio did not have ability to be used as predictor of stock profit.

Research about financial ratio in predicting stock profit more comprehensively done by Ou and Penman (1989). By analyzing 58 financial ratios, Ou and Penman aimed at testing the usage of financial report analysis in assessing the company values. The results showed that accounting information that is indicated by financial ratio contain fundamental information that is not reflected in the stock price.

As stated before, the rapid development of positivistic approach in arranging accounting theory has encouraged researches that connect financial ratio with various accounting and economic phenomenon. Below will be explained some of them that is relevant for foundation of the research hypothesis, that is that connect financial ratio with accounting profit. More comprehensive research to accounting studies about financial ratio that is connected with other phenomenon will be done at the next chapter. Machfoedz (1994) analyzed some financial ratio and connected with profit change in Indonesia. In the research, Machfoedz tested 47 financial ratio by using sample companies that is listed at Jakarta Stock Exchange that published their financial ratio from 1989 to 1992. By using MAXR-Procedure, the results showed that there are 13 significant financial ratio in predicting profit change one year in the future.
HYPOTHESES

H1: current ratio structure of company after merger and acquisition higher than before merger and acquisition
H2: leverage structure of company after merger and acquisition higher than before merger and acquisition
H3: operating profit margin structure of company after merger and acquisition higher than before merger and acquisition
H4: total asset turnover structure of company after merger and acquisition higher than before merger and acquisition
H5: inventory turnover structure of company after merger and acquisition higher than before merger and acquisition

METHOD

Sample

Population in the research is all go public companies and listed at Indonesian Stock Exchange (BEJ) with classification of manufacturing companies that conducted merger and acquisition in 2007–2008. The population amount in the research were 76 companies that conducted merger and acquisition in 2007–2008. The sample taken by purposive sampling, with criteria as follow: sample is manufacturing company that have went public in 2007–2008, the samples are as follows:

DATA COLLECTION

The research developed the previous empirical research that has been done in 2005 and then be reanalyzed in 2008 with the obtained data in the form of publication. Data base of daily stock return at PT Bursa Efek Indonesia (2007) at BEJ Corner of
List of companies

<table>
<thead>
<tr>
<th>No</th>
<th>Company names</th>
<th>Listing</th>
<th>Merger and acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT EverShine Textile</td>
<td>October 13 1990</td>
<td>December 06 1993</td>
</tr>
<tr>
<td>2</td>
<td>PT Hadtex Indosintec</td>
<td>June 06 1990</td>
<td>June 02 1995</td>
</tr>
<tr>
<td>3</td>
<td>PT Semen Gresik</td>
<td>August 07 1990</td>
<td>July 20 1995</td>
</tr>
<tr>
<td>4</td>
<td>PT Sumalindo Jaya Lestari</td>
<td>October 1990</td>
<td>December 12 1995</td>
</tr>
<tr>
<td>5</td>
<td>PT Tempo Scan Pacific</td>
<td>June 17 1989</td>
<td>January 07 1995</td>
</tr>
<tr>
<td>6</td>
<td>PT Citra Development</td>
<td>March 28 1991</td>
<td>September 18 1996</td>
</tr>
<tr>
<td>7</td>
<td>PT Plusa Indonesia Reality Tbk</td>
<td>July 14 1991</td>
<td>June 30 1996</td>
</tr>
<tr>
<td>8</td>
<td>PT Tira Austenite</td>
<td>July 27 1990</td>
<td>April 01 1996</td>
</tr>
<tr>
<td>9</td>
<td>PT Unggul Indah Corporation Tbk</td>
<td>November 06 1989</td>
<td>December 03 1996</td>
</tr>
<tr>
<td>10</td>
<td>PT Astra Graphia</td>
<td>November 15 1989</td>
<td>June 12 1997</td>
</tr>
<tr>
<td>11</td>
<td>PT Igjar Jaya Tbk</td>
<td>November 05 1989</td>
<td>October 25 1997</td>
</tr>
<tr>
<td>12</td>
<td>PT GT Kabel Indonesia Tbk</td>
<td>July 06 1992</td>
<td>September 23 1997</td>
</tr>
<tr>
<td>13</td>
<td>PT Multi Polar Corporation</td>
<td>November 06 1989</td>
<td>September 29 1997</td>
</tr>
<tr>
<td>14</td>
<td>PT Fast Food Indonesia</td>
<td>October 13 1993</td>
<td>April 11 1998</td>
</tr>
</tbody>
</table>

(Source: Indonesian Stock Exchange 2007–2008)

Economic Faculty of Brawijaya University, and other sources that support the merger and acquisition analyses investigation.

RESULTS

Data analysis

Data is collected and analyzed to know the aims of merger and acquisition toward company performance the writer still used parametric statistic method, that is Paired Sample T Test.

The first up to fifth hypothesis done to analyze the influence of merger and acquisition in the form of companies ratio before merger and acquisition compared with after merger and acquisition. The financial ratios consist of 5 financial ratios, that is: current ratio, leverage, operating profit margin, total asset turnover, and inventory turnover. The financial performance testing done in one year up to four year before and after acquisition. The first hypothesis testing up to eighth hypothesis done by parametric statistic in the form of Paired Sample T Test. The second hypothesis steps as follows:

After the ratio value be obtained, it is done testing toward the first hypothesis up to fifth hypothesis, with steps as follows:

Paired Sample T Test: the variance test done to know are there differences between company performance before and after acquisition (Sudjana, 1996: 242).

The formula as follows:

\[ S^2 = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2} \]

\[ t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \]

Where:

If calculated statistic (output t number) > table statistic, \( H_0 \) rejected.
If calculated statistic (output t number) < table statistic, \( H_0 \) accepted.
If probability > 0.05, \( H_0 \) accepted.
If probability > 0.05, H1 rejected
Analysis program using SPSS 15 Program for Windows

DISCUSSION
First hypothesis testing
First hypothesis testing of current ratio structure after merger and acquisition higher significantly compared with current ratio structure before merger and acquisition. The hypothesis testing is done by using Paired Sample T Test at 0.05% for each tested period, that is for 1 year before and after merger and acquisition, 3 year before and after merger and acquisition.

Current ratio is favorite ratio for lending institution, because of that, they expect produce positive cash surplus. So company need to create value above 1.0 for the ratio. Although the value is standard value for most of business types, but some business able to operate at lower value.

From statistical analysis results that can be seen at table below, it can be known that for period 1 year up to 2 year, before and after merger and acquisition experience increase. It is statistically shown at the period the significance structure of 0.000. Testing results is consistent with comparison between \( t_{calculated} \) of -13.472 that is higher than \( t_{table} \) of 2.06.

Based on testing results (empirical evidence) then it can be concluded that the first hypothesis is in period 1 year, 2 year before and after merging and acquisition is not supported or not accepted. So, in the research, statistically can be concluded that merger and acquisition significantly able to improve the current ratio of company after 2 years.

Second hypothesis testing
The second hypothesis testing test about the leverage structure of company after merger and acquisition higher than leverage structure before merger and acquisition. To test the second hypothesis, the researcher also use Paired Sample T Test with significance structure of 5%. The second hypothesis testing also done in 1 year before and after merger and acquisition, 2 year before and after merger and acquisition.

The statistic analysis test that can be seen at table and known that for period 1 year before and after merger and acquisition, leverage structure of the company decrease, but the decrease statistically not significant. For 2 years period before and after merger and acquisition, the company leverage structure increase.

The leverage structure can be substantially improve the return to the shareholder, but the high responsibility for risk is the price that should be paid for the return. Pretension to reach the high return structure for shareholder should be controlled by company risk profile.

Based on the testing results (empirical evidence) it can be concluded that the second hypothesis for 1 and 2 years period before and after merger and acquisition can not be supported or not accepted. So, in the research statistically can be concluded that merger and acquisition significantly able to improve company leverage after 2 years.

Third hypothesis testing
Third hypothesis testing test about operating profit margin of company before and after merger and acquisition higher significantly than operating profit margin before merger and acquisition.

Analysis results for operating profit margin can be seen at table below, it is known that for operating profit margin average for 1 year and 2 year period before and after merger and acquisition experience decrease, but the decrease is not significant. Then it
Hermanto

Paired Sample T Test for Leverage results

<table>
<thead>
<tr>
<th>No</th>
<th>Period</th>
<th>N</th>
<th>Mean</th>
<th>T-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 year before M&amp;A</td>
<td>26</td>
<td>0.5869</td>
<td>0.368</td>
<td>0.702</td>
</tr>
<tr>
<td></td>
<td>1 year after M&amp;A</td>
<td></td>
<td>0.5663</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2 year before M&amp;A</td>
<td>26</td>
<td>0.5858</td>
<td>-0.634</td>
<td>0.532</td>
</tr>
<tr>
<td></td>
<td>2 year after M&amp;A</td>
<td></td>
<td>0.6337</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: processed secondary data)

Paired Sample T Test for operating profit margin results

<table>
<thead>
<tr>
<th>No</th>
<th>Period</th>
<th>N</th>
<th>Mean</th>
<th>T-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 year before M&amp;A</td>
<td>26</td>
<td>0.1782</td>
<td>0.050</td>
<td>0.961</td>
</tr>
<tr>
<td></td>
<td>1 year after M&amp;A</td>
<td></td>
<td>0.1761</td>
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<tr>
<td>2</td>
<td>2 year before M&amp;A</td>
<td>26</td>
<td>0.1745</td>
<td>0.993</td>
<td>0.330</td>
</tr>
<tr>
<td></td>
<td>2 year after M&amp;A</td>
<td></td>
<td>0.1363</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: processed secondary data)

can be said that in the research merger and acquisition able to increase operating profit margin after 2 years.
The ratio also important in assessing companies that conduct merger and acquisition, it is to know how much profit margin for sales that increase.

Fourth hypothesis testing

The fourth hypothesis testing test the total asset turn over of company before and after merger and acquisition significantly compared with company structure before merger and acquisition. After company conduct merger and acquisition then the asset total increase will occur, but to look how much effectiveness of owned asset in reaching expected synergy able to help to know.

Based on statistical analysis results (look at table), total asset turn over structure experience increase either from period 1 year and 2 year, before and after merger and acquisition. It is shown by significance value of 0.000 that is lower than the determined significance structure of 0.05. It is consistent with t_calloed of -0.5093 that outside of area H_0 accepted of 2.06

Based on the testing results (empirical evidence) it can be concluded that the fourth hypothesis for 1 or 2 years period before and after merger and acquisition can not be accepted.

Fifth hypothesis testing

The fifth hypothesis testing test the inventory turnover structure of company after merger and acquisition significantly then after merger and acquisition. The hypothesis testing done by using Paired Sample T Test at structure \( \alpha = 5\% \) for each tested period, that is for 1 year period and after merger and acquisition, 2 year before and after merger and acquisition.

The analysis results can be known from various inventory turnover structure change of company from
### Merger and Acquisition Analyses Toward the Financial Performance

#### Paired Sample T Test for inventory turnover results

<table>
<thead>
<tr>
<th>No</th>
<th>Period</th>
<th>N</th>
<th>Mean</th>
<th>T-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>26</td>
<td>4.4954</td>
<td>-1.200</td>
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<tr>
<td></td>
<td>1 year after M&amp;A</td>
<td></td>
<td>9.2214</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2 year before M&amp;A &amp; A</td>
<td>26</td>
<td>4.4862</td>
<td>-1.774</td>
<td>0.088</td>
</tr>
<tr>
<td></td>
<td>2 year after M&amp;A &amp; A</td>
<td></td>
<td>5.5107</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: processed secondary data*

Various period. For period 1 year after merger and acquisition the inventory turnover structure experience improvement greatly up to the average structure of 9.2214. But further, the results should be supported by appropriate analysis to know clearly the occurred improvement.

Based on the done analysis by using paired sample T test at structure α = 5% (table 6), average structure 1 year before and after merger and acquisition improve, but the improvement did not show different things because the higher significance structure than 0.05, that is 0.242. And also for 2 years before and after merger and acquisition, the occurred improvement did not show different things because the significance structure that higher than 0.05.

### CONCLUSION

Based on analysis, then the analysis results still support the previous research, that the merger analysis and acquisition that is done to improve company synergy. Further, researcher know whether the financial performance that measured from current ratio, leverage, operating profit margin, total asset turnover, inventory turnover after merger and acquisition experience improvement compared than before merger and acquisition.

The decision of merger and acquisition should be considered seriously in effort to reach synergy. The research in general aimed at obtaining synergy, but after merger and acquisition decision in period of 2 year after merger and acquisition, the synergy can not be reached. After 2 years of merger and acquisition, the synergy in general can be reached. For that thing, in the merger and acquisition decision, the company strategy should be strong, the industrial knowledge and target company should be strong, how the target company management should be known in detail. Beside that, most acquiring companies, the merger and acquisition decision often because of motivation to save the target company from the target company.

### REFERENCES


