The Prospect of Retail Industry Growth in Indonesia

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Abstract

The purpose of this research is to find out the prospect of retail industry growth in Indonesia through financial report with ratio, stock and z-score if they are good or bad with PT. Matahari, PT. Ramayana and PT. Hero as the research objects. Based on the purpose of this research, the hypotheses are: 1) The prospect of retail industry is good if measured by using ratio 2) The prospect of retail industry is good if measured by stock analysis 3) The prospect of retail industry is good if measured by z-score. The design of this research is descriptive research. Meanwhile, the research method used is through data secondary approach. The research sample is financial report of retail industry from 2014 to 2017 (PT Matahari, PT Ramayana and PT Hero). Sampling technique used area sampling (Sugiono, 2009). Analysis method used ratio analysis, stock analysis and z-score analysis to respond the hypotheses. The research result based on the descriptive analysis toward variable used on the performance of retail industry financial report is proven to be good. The research result based on the three analysis tools on the performance of retail industry financial report is proven to be good. The result of ratio analysis on the performance of retail industry financial report is proven to be good. The result of stock analysis on the performance of retail industry financial report is proven to be good and the result of z-score analysis on the performance of retail industry financial report is proven to be good.

Keywords: Financial report, Ratio analysis, Stock analysis, Z-Score.

Introduction

The growth of retail business these years has become a great attention since there are many retail companies falling apart and some of them still survive like PT matahari, PT Ramayana dan PT Hero. This condition is caused by the declined purchasing power of people that influences the retail industry. Besides, there is a change in the lifestyle of the people that choose to shop through internet by using master card 58 % (Google 2018). The decrease of their purchasing power changes to the increase of their lifestyle for fun where they prefer to go to coffee shop, electronics. Mall is no longer a place for shopping but has changed function to a place for socializing and hanging out (Pre-research)

Bankruptcy is a main problem that needs to be aware of by every company. If a company is bankrupt, it means the company is failed in running its business. Therefore, analysis of bankruptcy prediction needs to be done (Dimitras, 2005).

The company ability to pay for its debts, not only the short-term but also the long-term, company ability to provide working capital, company capability to run the company, company ability to gain profit and pay for dividend to the stock holders, all of those are a picture of a healthy company. PT Matahari, PT Ramayana and PT Hero became the object of this research. Researchers will predict the performance of their financial report. The performance of financial health will be analyzed through ratio analysis, stock analysis and z-score analysis.

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Identification and discussion framework

1. Is the condition of financial report performance of Retail Industry good if measured by Ratio Analysis?
2. Is the condition of financial report performance of Retail Industry good if measured by Stock Analysis?
3. Is the condition of financial report performance of Retail Industry good if measured by Z-score?

Literature –

The Performance of Retail Industry Financial Report

The performance of retail industry financial report is a result achieved by several companies that is stated in term of money value and described in form of financial report of each company. The performance of retail industry financial report can be measured by using ratio analysis, stock analysis and z-score analysis (Osteryoung, J., Constand, R, Nast, D: 2002)

Ratio Analysis

Gibson, C.H (2011) stated that ratio analysis is analysis tool used to measure financial performance of retail industry company, the ratio indicators used are liquidity, solvability, activity and profitability.

Stock Analysis

Basu(2004) explained stock is a form of possession of company under personal name in form of paper. Stock analysis is used to measure stock price and company condition with the measuring tools earnings per share, price earnings ratio, dividend per share, dividend yield and book value (Basu,2004)

Z score Analysis

Z-score is an analysis tool of bankruptcy prediction that is acceptable, and used to predict possibility ahead of company image if it is in normal condition or bankrupt. Z-score measuring tools are current assets, liability debts, working capital, total asset (A); earnings before Interests tax, total assets (B); earning before tax , current liabilities (C); sales, total assets (D), (Altman, 1968).

Hypothesis:

1. The condition of retail industry financial report measured by ratio analysis
   The condition of retail industry financial report measured by ratio analysis is good.
2. The condition of retail industry financial report measured by stock analysis
   The condition of retail industry financial report measured by stock analysis is good.
3. The condition of retail industry financial report measured by Z-score
   The condition of retail industry financial report performance measured by z-score is good.

The Concept of The Research

According to the context of this research, a conceptual model of research prospect of retail industry growth in Indonesia is made and the analysis tools are ratio analysis, stock analysis and z-score with the research objects are PT Matahari, PT Ramayana and PT Hero Figure.
The design of this research is used descriptive research through secondary data approach. The samples are 4 periods of financial reports of the retail industries (PT. Matahari, PT. Ramayana and PT Hero) started from 2014 to 2017 in Jakarta, Indonesia. Research sampling technique is area sampling (Sugiono, 2009).

Analysis tools used to describe research variables are ratio analysis, stock analysis and z-score analysis.

Study Result–

a. Ratio analysis

1. The result of liquidity ratio can be seen in Table 1

|   | Current ratio - Current assets : Current liability (millions) |
|---|-------------------------------------------------------------|
|   | 2014          | 2015          | 2016          | 2017          |
| 1 | PT Matahari   | 84%          | 96%          | 115%         | 113%         |
|   | 2,117,507     | 2,272,941    | 2,974,052    | 2,973,749    |
|   | 2,518,521     | 2,439,014    | 2,588,354    | 2,610,824    |
| 2 | PT Ramayana  | 278%         | 294%         | 280%         | 295%         |
|   | 2,694,944     | 3,831,172    | 2,830,815    | 3,093,496    |
|   | 967,544       | 960,890      | 1,008,981    | 1,048,640    |
| 3 | PT Hero      | 117%         | 121%         | 142%         | 127%         |
|   | 3,283,248     | 3,156,943    | 2,817,240    | 2,544,725    |
|   | 2,788,135     | 2,608,222    | 1,970,941    | 2,001,461    |
Table 2. Cash ratio  - Cash : Current liability (millions)

|   | 2014  | 2015  | 2016  | 2017  |
|---|-------|-------|-------|-------|
| 1 | PT. Matahari | 31% | 38 % | 66% | 60% |
|   | 785.895 | 946.658 | 1,712.844 | 1,582.817 |
|   | 2,518.521 | 2,439.014 | 2,588.354 | 2,610.824 |
| 2 | PT. Ramayana | 170% | 190% | 174% | 193% |
|   | 625.373 + 1,026.105 | 844.253 + 984.004 | 603.750 + 1,156.855 | 751.901 + 1,279.068 |
|   | 967.544 | 960.890 | 1,008.981 | 1,048.640 |
| 3 | PT Hero | 7% | 5% | 9% | 11% |
|   | 196.533 | 147.310 | 183.189 | 226.399 |
|   | 2,788.133 | 2,608.222 | 1,970.941 | 2,001.401 |

Table 3. Quick ratio  - (Current assets – Inventory) : Current liability (millions)

|   | 2014  | 2015  | 2016  | 2017  |
|---|-------|-------|-------|-------|
| 1 | PT. Matahari | 46% | 47% | 76% | 75% |
|   | 2,111.507 - 955.231 | 2,272.741 - 1,107.811 | 2,974.052 - 955.278 | 2,973.745 - 1,005.484 |
|   | 2,518.521 | 2,439.014 | 2,588.354 | 2,610.824 |
| 2 | PT. Ramayana | 195% | 209% | 198% | 214 % |
|   | 2,694.944 - 808.071 | 2,831.172 - 834.400 | 2,830.815 - 1,008.981 | 3,093.496 - 1,048.640 |
|   | 967.544 | 960.890 | 1,008.981 | 1,098.640 |
| 3 | PT Hero | 36% | 55% | 43% | 46% |
|   | 3,283.248 - 2,271.544 | 3,516.943 - 2,059.544 | 2,817.240 - 1,961.664 | 2,544.725 - 1,616.534 |
|   | 2,788.133 | 2,608.222 | 1,970.941 | 2,001.401 |

Table 4. Working capital ratio  - (current assets – current liability) : total assets

|   | 2014  | 2015  | 2016  | 2017  |
|---|-------|-------|-------|-------|
| 1 | PT. Matahari | -11% | -4% | 7% | 6% |
|   | 2,117.507 - 2,518.521 | 2,272.741 - 2,439.014 | 2,974.052 - 2,588.354 | 2,973.745 - 2,610.824 |
|   | 3,421.954 | 3,889.291 | 4,858.878 | 5,427.426 |
| 2 | PT. Ramayana | 37% | 40% | 39% | 41% |
|   | 2,694.944 – 967.544 | 2,831.172 – 960.890 | 2,830.815 – 1,008.981 | 3,093.496 – 1,048.640 |
|   | 4,554.667 | 4,574.904 | 4,647.009 | 4,891.922 |
| 3 | PT Hero | 6% | 7% | 11% | 7% |
|   | 3,283.248 – 2,788.133 | 3,156.943 – 2,608.222 | 2,817.240 – 1,970.941 | 2,544.25 – 2,001.461 |
|   | 8,295.642 | 8,042.797 | 7,487.033 | 7,563.144 |

2. The result of solvability ratio can be seen in Table 5 - 8

Table 5. Debt to equity ratio  - Total liability : Equity millions

|   | 2014  | 2015  | 2016  | 2017  |
|---|-------|-------|-------|-------|
| 1 | PT. Matahari | 2.168% | 2.51% | 1.61% | 95% |
|   | 3,253,691 | 2,783,124 | 3,003,635 | 3,099,441 |
|   | 150,263 | 1,106,167 | 1,855,243 | 2,327,965 |
| 2 | PT Ramayana | 35% | 37% | 39% | 40% |
|   | 1,195,220 | 1,241,100 | 1,309,610 | 1,397,577 |
|   | 3,359,447 | 3,333,804 | 3,337,309 | 3,494,345 |
| 3 | PT Hero | 52% | 54% | 57% | 41% |
|   | 2,841,822 | 2,828,419 | 2,029,250 | 2,164,401 |
|   | 5,453,820 | 5,214,378 | 5,457,783 | 5,198,743 |
Table 6. Debt ratio - Total liability : Total assets (millions )

|   |       | 2014       | 2015       | 2016       | 2017       |
|---|-------|------------|------------|------------|------------|
| 1 | PT . Matahari | 93 %       | 71 %       | 62 %       | 57 %       |
|   |       | 3,253,691  | 2,783,124  | 3,003,635  | 3,099,441  |
|   |       | 3,421,954  | 3,889,291  | 4,858,878  | 5,427,426  |
| 2 | PT Ramayana | 26 %       | 27 %       | 29 %       | 28 %       |
|   |       | 1,195,270  | 1,241,100  | 1,309,610  | 1,397,677  |
|   |       | 4,554,667  | 4,574,904  | 4,467,009  | 4,891,922  |
| 3 | PT Hero     | 34 %       | 32 %       | 27 %       | 29 %       |
|   |       | 2,841,822  | 2,838,419  | 2,029,280  | 2,164,401  |
|   |       | 8,295,642  | 8,042,797  | 7,487,033  | 7,363,144  |

Table 7. Long term debt equity ratio - Long term liability : Equity

|   |       | 2014       | 2015       | 2016       | 2017       |
|---|-------|------------|------------|------------|------------|
| 1 | PT . Matahari | 462 %      | 31 %       | 22 %       | 20 %       |
|   |       | 753,170    | 344,110    | 415,281    | 488,617    |
|   |       | 159,263    | 1,106,167  | 1,855,243  | 2,377,965  |
| 2 | PT Ramayana | 8 %        | 8 %        | 9 %        | 10 %       |
|   |       | 272,676    | 280,210    | 300,629    | 348,937    |
|   |       | 3,359,447  | 3,333,804  | 3,337,399  | 3,494,345  |
| 3 | PT Hero     | 0 %        | 4 %        | 1 %        | 3 %        |
|   |       | 53,689     | 220,197    | 58,309     | 162,940    |
|   |       | 5,453,820  | 5,214,378  | 5,457,783  | 5,198,743  |

Table 8. Time interest earning ratio - Profit before tax : Interest of long time liability

|   |       | 2014       | 2015       | 2016       | 2017       |
|---|-------|------------|------------|------------|------------|
| 1 | PT . Matahari | 11 X       | 30 X       | 230 X      | 159 X      |
|   |       | 1,850,544  | 2,244,621  | 2,532,666  | 2,396,300  |
|   |       | 169,097    | 73,702     | 11,750     | 15,474     |
| 2 | PT Ramayana | 0          | 0          | 0          | 0          |
|   |       | 388,124    | 364,620    | 465,065    | 466,592    |
|   |       | 0          | 0          | 0          | 0          |
| 3 | PT Hero     | 6.8 X      | -3 X       | 6.8 X      | -62 X      |
|   |       | 68,443     | (91,184)   | 184,449    | (251,647)  |
|   |       | 10,181     | 27,870     | 27,712     | 4,494      |

3. The result of activity ratio can be seen in Table 9 - 13

Table 9. Total assets turn over - Sales : Total assets (millions )

|   |       | 2014       | 2015       | 2016       | 2017       |
|---|-------|------------|------------|------------|------------|
| 1 | PT . Matahari | 2.3 X      | 2.3 X      | 2 X        | 1.8 X      |
|   |       | 7,925,547  | 9,006,893  | 9,897,046  | 10,023,961 |
|   |       | 3,421,954  | 3,889,291  | 4,858,878  | 5,427,426  |
| 2 | PT Ramayana | 1.28 X     | 1.2 X      | 1.2 X      | 1.1 X      |
|   |       | 5,861,348  | 5,533,004  | 5,857,037  | 5,622,728  |
|   |       | 4,554,667  | 4,467,009  | 4,647,009  | 4,891,922  |
| 3 | PT Hero     | 1.53 X     | 1.78       | 1.82 X     | 1.77 X     |
|   |       | 12,768,973 | 14,352,700 | 13,677,931 | 13,033,638 |
|   |       | 8,295,642  | 8,042,797  | 7,487,033  | 7,363,144  |
Table 10. Receivable turnover - Sales: Average of receivable (millions)

|   | 2014       | 2015       | 2016       | 2017       |
|---|------------|------------|------------|------------|
| 1 | PT Matahari| 176 X      | 230 X      | 135 X      | 74 X       |
|   | 7.925,547  | 9.006,893  | 9.897,046  | 10,023,961 |
|   | 45.063     | 39.312     | 73.137     | 134,278    |
| 2 | PT Ramayana| 2,930 X    | 1.844 X    | 488 X      | 562 X      |
|   | 5,861,348  | 5.533,004  | 5.857,037  | 5.622,728  |
|   | 2,590      | 3.652      | 12,025     | 10,046     |
| 3 | PT Hero    | 36 X       | 36 X       | 63 X       | 47 X       |
|   | 12,768,973 | 14,362,700 | 13,677,931 | 13,033,638 |
|   | 352,396    | 390,900    | 214,262    | 273,970    |

Table 11. Average collection period - (Receivable X 360)/Sales

|   | 2014       | 2015       | 2016       | 2017       |
|---|------------|------------|------------|------------|
| 1 | PT Matahari| 2,04 hari  | 1,57 hari  | 2,66 hari  | 4,82 hari  |
|   | 45.063 X 360| 39,312 X 360| 9.006,893 | 73,137 X 360| 9.897,046 |
|   | 7.925,547 | 9.006,893  | 73,137     | 134,278    |
| 2 | PT Ramayana| 0,16 hari  | 0,23 hari  | 0,73 hari  | 0,64 hari  |
|   | 2,590 X 360| 3.652 X 360| 5.533,004  | 12,025 X 360| 5.857,037 |
|   | 5,861,348 | 5.533,004  | 12,025     | 5.622,728  |
| 3 | PT Hero    | 9,9 hari   | 9,7 hari   | 5,6 hari   | 7,56 hari  |
|   | 352,396 X 360| 390,900 X 360| 214,262 X 360| 273,970 X 360|
|   | 12,768,973 | 14,362,700 | 13,677,931 | 13,033,638 |

Table 12. Inventory turnover - Cost of goods: Inventory

|   | 2014       | 2015       | 2016       | 2017       |
|---|------------|------------|------------|------------|
| 1 | PT Matahari| 3 X        | 3 X        | 3,1 X      | 3,7 X      |
|   | 2,877,507  | 3,335,638  | 3,085,279  | 3,762,021  |
|   | 955,231    | 1,007,811  | 995,278    | 1,005,484  |
| 2 | PT Ramayana| 4,7 X      | 4,2 X      | 4,3 X      | 4,6 X      |
|   | 3,813,511  | 3,537,000  | 3,654,539  | 3,410,434  |
|   | 808,569    | 823,900    | 834,400    | 740,993    |
| 3 | PT Hero    | 4,2 X      | 5,3 X      | 5,1 X      | 5,9 X      |
|   | 9,743,041  | 11,026,182 | 10,107,503 | 9,591,191  |
|   | 2,271,071  | 2,052,344  | 1,901,664  | 1,616,534  |

Table 13. Average days inventory - Inventory X 360): Cost of goods

|   | 2014       | 2015       | 2016       | 2017       |
|---|------------|------------|------------|------------|
| 1 | PT Matahari| 199 hari   | 108 hari   | 116 hari   | 98 hari    |
|   | 955,231 X 360| 1,007,811 X 360| 995,276 X 360| 3,085,279  |
|   | 2,877,507 | 3,335,638  | 995,276    | 1,025,484  |
|   | 955,231    | 1,007,811  | 3,085,279  | 3,762,021  |
| 2 | PT Ramayana| 76 hari    | 83 hari    | 82 hari    | 78 hari    |
|   | 808,569 X 360| 823,909 X 360| 834,400 X 360| 3,634,539  |
|   | 3,813,511  | 3,537,000  | 834,400    | 740,993    |
|   | 808,569    | 823,909    | 3,634,539  | 3,410,434  |
| 3 | PT Hero    | 84 hari    | 67 hari    | 69 hari    | 60 hari    |
|   | 2,271,544 X 360| 2,052,544 X 360| 1,961,664 X 360| 1,616,534 X 360|
|   | 9,743,041  | 11,026,182 | 1,961,664  | 9,591,191  |

4. The result of profitability ratio can be seen in Table 14 - 20
### Table 14. Gross margin ratio -Gross profit : Sales( millions )

|     | 2014      | 2015      | 2016      | 2017      |
|-----|-----------|-----------|-----------|-----------|
| 1   | PT. Matahari | 73 %      | 62 %      | 62 %      | 62 %      |
|     | 5,048,040  | 5,671,255  | 6,211,767  | 6,261,940  |
|     | 7,925,547  | 9,006,893  | 9,897,046  | 10,023,961 |
| 2   | PT. Ramayana | 34 %      | 35 %      | 34 %      | 39 %      |
|     | 2,047,837  | 1,996,604  | 2,002,498  | 2,212,294  |
|     | 5,861,348  | 5,533,004  | 5,857,037  | 5,622,728  |
| 3   | PT. Hero | 23%        | 23%        | 26%        | 26%        |
|     | 3,025,932  | 3,326,518  | 3,570,428  | 3,442,447  |
|     | 12,768,973 | 14,352,799 | 13,677,931 | 13,033,638 |

### Table 15. Operating income ratio -Operating income : Sales

|     | 2014      | 2015      | 2016      | 2017      |
|-----|-----------|-----------|-----------|-----------|
| 1   | PT. Matahari | 29 %      | 23 %      | 25%       | 23 %      |
|     | 2,337,648  | 2,083,912  | 2,533,911  | 2,376,663  |
|     | 7,925,543  | 9,006,893  | 9,877,046  | 10,023,961 |
| 2   | PT. Ramayana | 5%        | 4%        | 6%        | 6%        |
|     | 298,412    | 250,694    | 368,154    | 368,784    |
|     | 5,581,344  | 5,533,004  | 5,857,037  | 5,622,728  |
| 3   | PT. Hero | 0%         | -6 %       | 1%         | -1%       |
|     | 68,443     | (91,184)   | 184,449    | (251,647)  |
|     | 12,708,973 | 14,352,799 | 13,671,931 | 13,033,638 |

### Table 16. Operating ratio -Cost of goods + expenses : Sales

|     | 2014      | 2015      | 2016      | 2017      |
|-----|-----------|-----------|-----------|-----------|
| 1   | PT. Matahari | 73 %      | 62 %      | 62 %      | 62 %      |
|     | 2,877,507  | 3,335,638  | 3,665,276  | 3,762,021  |
|     | +2,937,013 | +3,341,741 | +3,683,671 | +3,852,799 |
|     | 7,925,537  | 9,006,893  | 9,877,046  | 10,023,961 |
| 2   | PT. Ramayana | 81%       | 95%       | 93%       | 93%       |
|     | 3,813,311  | 3,537,000  | 3,634,539  | 3,410,434  |
|     | +399,364+1,354,967 | +385,212+1,377,266 | +408,190+1,436,917 | +379,456+1,476,485 |
|     | 5,581,348  | 5,533,004  | 5,857,037  | 5,622,728  |
| 3   | PT. Hero | 101%       | 100%       | 102%       | 97%       |
|     | 9,743,071  | 11,026,182 | 10,170,503 | 9,591,191  |
|     | +3,199,396 | +3,572,879 | +3,604,301 | +3,766,137 |
|     | 12,708,973 | 14,352,700 | 13,077,931 | 13,033,638 |

### Table 17. Net profit margin -Profit after tax :Sales

|     | 2014      | 2015      | 2016      | 2017      |
|-----|-----------|-----------|-----------|-----------|
| 1   | PT. Matahari | 17%       | 19%        | 20%       | 19%      |
|     | 1,419,116  | 1,780,848  | 2,019,705  | 1,907,077  |
|     | 7,925,547  | 9,006,893  | 9,877,040  | 10,023,961 |
| 2   | PT. Ramayana | 6%        | 5%        | 7%        | 8%        |
|     | 355,075    | 336,054    | 408,479    | 406,580    |
|     | 5,861,348  | 5,533,004  | 5,857,037  | 5,622,728  |
| 3   | PT. Hero | 0%         | 0%         | 1%         | -1%       |
|     | 63,655     | (82,222)   | 152,281    | (191,406)  |
|     | 12,768,973 | 14,352,700 | 13,671,931 | 13,033,638 |
### Table 18. Earning power total investment

|     | 2014          | 2015          | 2016          | 2017          |
|-----|---------------|---------------|---------------|---------------|
| 1   | PT.Matahari   | 54 % 1.880.544| 57 % 2.244.821| 52 % 2.332.66 |
|     |               | 3.412.954     | 3.889.291     | 4.858.878     |
| 2   | PT.Ramayana   | 8 % 388.124   | 5 % 264.620   | 10 % 465.065 |
|     |               | 4.554.667     | 4.574.904     | 4.647.009     |
| 3   | PT.Hero       | 0 % 63.655    | -1 % -82.222  | 2 % 184.449   |
|     |               | 8.295.642     | 8.042.797     | 7.487.033     |

### Table 19. Net earning power ratio

|     | 2014          | 2015          | 2016          | 2017          |
|-----|---------------|---------------|---------------|---------------|
| 1   | PT.Matahari   | 41 % 1.419.116| 45% 1.780.848 | 41 % 2.019.705|
|     |               | 3.412.954     | 3.889.291     | 4.858.878     |
| 2   | PT.Ramayana   | 7 % 355.075   | 7 % 336.054   | 8 % 408.479   |
|     |               | 4.554.667     | 4.574.904     | 4.647.009     |
| 3   | PT.Hero       | 0 % 63.655    | -1 % -82.222  | 2 % 152.281   |
|     |               | 8.295.642     | 8.042.797     | 7.487.033     |

### Table 20. Rate of return for owner's

|     | 2014          | 2015          | 2016          | 2017          |
|-----|---------------|---------------|---------------|---------------|
| 1   | PT.Matahari   | 890 % 1.419.116| 160 % 1.780.848| 108 % 2.019.705|
|     |               | 159.263       | 1.106.167     | 1.855.243     |
| 2   | PT.Ramayana   | 10 % 355.075  | 10 % 336.054  | 12 % 408.479  |
|     |               | 3.359.447     | 3.333.804     | 3.337.399     |
| 3   | PT.Hero       | 1 % 63.655    | -1 % -82.222  | 2 % 152.281   |
|     |               | 5.453.820     | 5.214.378     | 5.457.783     |

### b. Analisa Saham

The result of the stock analysis can be seen in Table 21–25.

### Table 21. Earning per share

|     | 2014          | 2015          | 2016          | 2017          |
|-----|---------------|---------------|---------------|---------------|
| 1   | PT.Matahari   | 709 1.419.116 | 890 1.780.848 | 1.009 2.019.705|
|     |               | 2.917         | 2.917         | 2.917         |
| 2   | PT.Ramayana   | 50 355.075    | 48 336.054    | 58 408.479    |
|     |               | 7.096         | 7.096         | 7.096         |
| 3   | PT.Hero       | 15 63.655     | -20 % -82.222| 38 % 152.281  |
|     |               | 4.183         | 4.183         | 4.183         |
### Table 22. Price earning ratio - Stock market price : Earning per share

|   | 2014   | 2015   | 2016   | 2017   |
|---|--------|--------|--------|--------|
| 1 | PT.Matahari | 26     | 19     | 15     | 18     |
|   |         | 15,000 | 17,600 | 15.125 | 17,100 |
|   |         | 709    | 890    | 1.009  | 953    |
| 2 | PT.Ramayana | 15     | 13     | 20     | 26     |
|   |         | 790    | 645    | 1,195  | 1,510  |
|   |         | 50     | 48     | 58     | 58     |
| 3 | PT.Hero | 15     | -20    | 38     | 47     |
|   |         | 2,380  | 1,150  | 1,260  | 920    |
|   |         | 15     | -20    | 38     | -47    |

### Table 23. Dividend per share - Deviden payment by cash : Number of shares outstanding

|   | 2014   | 2015   | 2016   | 2017   |
|---|--------|--------|--------|--------|
| 1 | PT.Matahari | 230    | 425    | 623    | 707    |
|   |         | 460156 | 851,448| 1,246,826| 1,414,023|
|   |         | 2,917  | 2,917  | 2,917  | 2,917  |
| 2 | PT.Ramayana | 30     | 46     | 58     | 34     |
|   |         | 212,880| 327,428| 410,544| 242,021|
|   |         | 7,096  | 7,096  | 7,096  | 7,096  |
| 3 | PT.Hero | 75     | 50     | 25     | 0      |
|   |         | 300,00 | 200,000| 100,000| 0      |
|   |         | 4.183  | 4.183  | 4.183  | 4.183  |
Table 24. Dividend Yield - Dividend per share: Stock market price

|   | 2014 | 2015 | 2016 | 2017 |
|---|------|------|------|------|
| 1 | PT Matahari | 1%  | 24%  | 4%  | 4%  |
|   |      | 220  | 425  | 623  | 707  |
|   |      | 15,000 | 17,600 | 15,125 | 17,100 |
| 2 | PT Ramayana | 37% | 7%   | 4%  | 22% |
|   |      | 30   | 46   | 623  | 707  |
|   |      | 790  | 645  | 15,125 | 17,100 |
| 3 | PT Echo | 3%  | 4%   | 2%  | 0   |
|   |      | 75   | 50   | 25   | 0    |
|   |      | 2,380 | 1,150 | 1,260 | 920  |

Table 25. Book value - Owner's equity: Number of shares outstanding

|   | 2014 | 2015 | 2016 | 2017 |
|---|------|------|------|------|
| 1 | PT Matahari | 79  | 553  | 927  | 1,188 |
|   |      | 159,263 | 1,106,167 | 1,855,243 | 2,377,965 |
|   |      | 2,917 | 2,917 | 2,917 | 2,917 |
| 2 | PT Ramayana | 479 | 1,666 | 1,668 | 1,747 |
|   |      | 3,359,447 | 3,333,804 | 3,337,399 | 3,494,345 |
|   |      | 7,096 | 2,917 | 2,917 | 2,917 |
| 3 | PT Echo | 1,363 | 1,303 | 1,364 | 1,299 |
|   |      | 5,453,820 | 5,214,378 | 5,457,783 | 5,198,743 |
|   |      | 4,183 | 4,183 | 4,183 | 4,183 |

Analisa Z-score
a. The result of Z-score analysis can be seen in Table 26.
Result of the ratio, stock, z-score

a. Ratio analysis
1. Liquidity ratio

The industry retail liquidity calculation result is good (current ratio is good, cash ratio is good, quick ratio is good, working capital to total assets is bad) Table 27 – 30

Table 27. Current ratio - Current assets : Current liability

|                | 2014 | 2015 | 2016 | 2017 | Condition |
|----------------|------|------|------|------|-----------|
| 1 PT.Matahari  | 84%  | 96%  | 115% | 113% | Good      |
| 2 PT.Ramayana  | 278% | 294% | 280% | 295% | Good      |
| 3 PT.Hero      | 117% | 121% | 142% | 127% | Good      |

The ability of current assets in paying current liabilities from 2014 to 2017 in the three companies was good as seen in Table 27. The current liabilities of PT Ramayana is Rp 1,778,909,909 guaranteed by current liabilities Rp 2,957,397,397.

Table 28. Cash ratio - Cash : Current liability

|                | 2014 | 2015 | 2016 | 2017 | Condition |
|----------------|------|------|------|------|-----------|
| 1 PT.Matahari  | 31%  | 38%  | 66%  | 60%  | Good      |
| 2 PT.Ramayana  | 170% | 190% | 174% | 193% | Good      |
| 3 PT.Hero      | 7%   | 5%   | 9%   | 11%  | Good      |

Measuring the cash ability to pay current liabilities, in Table 28 in 2017 short term debt Rp 1,937,240,522 guaranteed by cash Rp 1,937,240,522.

Table 29. Quick ratio - (Current assets – Inventory) : Current liability

|                | 2014 | 2015 | 2016 | 2017 | Condition |
|----------------|------|------|------|------|-----------|
| 1 PT.Matahari  | 46%  | 47%  | 76%  | 75%  | Good      |
| 2 PT.Ramayana  | 195% | 209% | 198% | 214% | Good      |
| 3 PT.Hero      | 36%  | 55%  | 43%  | 46%  | Good      |
Measuring the current assets ability extracted by inventory to pay for the current liabilities. In Table 29, quick ratio of PT.Ramayana 2014 -2017 had an increase. In 2017 current liabilities was Rp 1, paid through current assets extracted by inventory Rp2,14. PT Matahari and PT Hero had low inventory-current asset ability in paying current liabilities between 36% - 76%.

### Table 30. Working capital to Total assets  
( current assets -current liability ) : Total assets

|   | 2014  | 2015  | 2016  | 2017  | Condition |
|---|-------|-------|-------|-------|-----------|
| 1 | PT.Matahari | -11%  | -4%   | 7%    | 6% Bad  |
| 2 | PT.Ramayana | 37%   | 40%   | 39%   | 1% Bad  |
| 3 | PT.Hero     | 6%    | 7%    | 11%   | 7% Bad  |

Working capital gained from total asset used for company operational. In Table 30, working capital to assets in 2014 to 2017 was fluctuated, and in 2017 for the three companies was still low.

### 2. Solvability ratio

The result of solvability ratio calculation of the company is good (debt to equity ratio is good, debt Ratio is good, long term debt equity is good, time interest earnings ratio is good) as seen in Table 31 – 32.

### Table 31. Debt to equity ratio  
-Total liability : Equity

|   | 2014  | 2015  | 2016  | 2017  | Condition |
|---|-------|-------|-------|-------|-----------|
| 1 | PT.Matahari | 2.168%| 251%  | 161%  | 95% Good |
| 2 | PT Ramayana | 35%   | 37%   | 39%   | 40% Good |
| 3 | PT Hero     | 52%   | 54%   | 37%   | 41% Good |

The companies fulfilled their short-term and long-term obligation funded by their own expense, in Table 31 debt to equity ratio of the three companies years to years was getting low which means with more debts self-capital is getting smaller.

### Table 32. Debt Ratio  
-Total liability : Total assets

|   | 2014  | 2015  | 2016  | 2017  | Condition |
|---|-------|-------|-------|-------|-----------|
| 1 | PT.Matahari | 95%   | 71%   | 62%   | 57% Good |
| 2 | PT Ramayana | 26%   | 27%   | 29%   | 28% Good |
| 3 | PT Hero     | 34%   | 32%   | 27%   | 29% Good |

The companies fulfilled the short-term and long-term financial obligation funded by total assets. In Table 32 debt ratio of the three companies from 2014 to 2017 was slightly sloping which means each company tried to increase more on the total assets and decrease the debts.

### Table 33. Long term debt  
- Long term liability : Equity

|   | 2014  | 2015  | 2016  | 2017  | Condition |
|---|-------|-------|-------|-------|-----------|
| 1 | PT. Matahari | 462%  | 31%   | 22%   | 20% Good |
| 2 | PT Ramayana | 8%    | 8%    | 9%    | 10% Good |
| 3 | PT Hero     | 0%    | 4%    | 1%    | 3% Good |

Companies in long-term financial obligation was funded by their own capital. Table 33 long term debt equity of the three companies was fluctuated. Each company tried to maximize to use its own capital by decreasing long-term debt.

### Table 34. Time interest earning ratio  
-Profit before tax : Interest of long time liability

|   | 2014  | 2015  | 2016  | 2017  | Condition |
|---|-------|-------|-------|-------|-----------|
| 1 | PT.Matahari | 11%   | 30%   | 230%  | 159% Good |
| 2 | PT Ramayana | 0%    | 0%    | 0%    | 0% - |
| 3 | PT Hero     | 6.8%  | 0%    | 6.8%  | 0% - |
Time needed for the company to pay yearly interest by depending on profit. **Table 34**  time interest earning ratio PT Matahari in 2017 was 159%.

3. **Activity ratio**

The calculation result of company activity ratio is good (total assets turnover is good, receivable turnover is good, inventory turnover is good, average days inventory is good) **Table 35 – 39**.

**Table35. Total assets turn over**  -Sales : Total assets

|   | 2014  | 2015  | 2016  | 2017  | Condition |
|---|-------|-------|-------|-------|-----------|
| 1 | PT. Matahari | 23 X | 23 X | 2 X | 1.8 X | Good |
| 2 | PT. Ramayana | 1.28 X | 1.2 X | 1.2 X | 1.1 X | Good |
| 3 | PT. Hero | 1.53 | 1.78 | 1.82 | 1.77 | Good |

Measuring the number of sales by using all company assets in **Table 35** in 2017 Asset turnover of the three companies had no significant change which mean sales and company assets also had no significant change.

**Table 36. Receivable turn over**  -Sale : Average of receivable

|   | 2014 | 2015 | 2016 | 2017 | Condition |
|---|------|------|------|------|-----------|
| 1 | PT. Matahari | 176 X | 230 X | 135 X | 74 X | Good |
| 2 | PT Ramayana | 2.930 X | 1.844 X | 488 X | 562 X | Good |
| 3 | PT Hero | 36 X | 36 X | 63 X | 47 X | Good |

Receivable turnover is measuring how many times credits turn over into cash in 1 year as seen in **Table 36** receivable turnover of the three companies from 2014 to 2017 tend to fluctuated.

**Table 37. Average collection period**  - (Receivable X 360) : sales

|   | 2014 | 2015 | 2016 | 2017 | Condition |
|---|------|------|------|------|-----------|
| 1 | PT. Matahari | 2,04 hari | 1,57 hari | 2,66 hari | 4,82 hari | Good |
| 2 | PT Ramayana | 0,16 hari | 0,23 hari | 0,73 hari | 0,64 hari | Good |
| 3 | PT Hero | 9,9 hari | 9,7 hari | 5,6 hari | 7,56 hari | Good |

The average period of credit age is < 30 days, in **Table 37** 2014 to 2017 showed that average period of credit age of the three companies is < 30 days (good).

**Table 38. Inventory turn over**  - Cost of good : inventory

|   | 2014 | 2015 | 2016 | 2017 | Condition |
|---|------|------|------|------|-----------|
| 1 | PT. Matahari | 3X | 3X | 3,1X | 3,7X | Good |
| 2 | PT Ramayana | 4,7 X | 4,2 X | 4,3X | 4,6 X | Good |
| 3 | PT Hero | 4,2 X | 5,3X | 5,1X | 5,9X | Good |

Inventory turnover ran efficiently as seen in **Table 38** in 2016 to 2017 was rising which means the cost of goods increase was followed by inventory mounting.

**Table 39. Average days inventory**

|   | 2014 | 2015 | 2016 | 2017 | Condition |
|---|------|------|------|------|-----------|
| PT. Matahari | 199 hari | 108 hari | 116 hari | 98 hari | Good |
| PT. Ramayana | 76 hari | 83 hari | 82 hari | 88 hari | Good |
| PT. Hero | 84 hari | 67 hari | 69 hari | 60 hari | Good |

Average days inventory is adequately good, that is the average days inventory to become goods stock in 2014 to 2017 was sloping as seen in **Table 39**, which means inventory was not long to be stock, it swiftly became goods and sold goods.
4. Profitability ratio

The result of company profitability ratio is bad (gross margin ratio is good, operating income ratio is bad, operating ratio is good, net profit margin is good, earning power total investment is good, net earning power ratio is bad, rate of return for owners is bad as seen in Table 40 – 46.

Table 40. Gross margin ratio - Gross profit : sales

|   | 2014 | 2015 | 2016 | 2017 | Condition |
|---|------|------|------|------|-----------|
| 1 | PT. Matahari | 73%  | 62%  | 62%  | 62% | Good |
| 2 | PT Ramayana  | 34%  | 35%  | 34%  | 34% | Good |
| 3 | PT Hero      | 23%  | 23%  | 26%  | 26% | Good |

The ability of the company to earn gross profit through sales activity in Table 40 for the three companies between 23% to 73% is adequately good.

Table 41. Operating income ratio - Operating income : Sales

|   | 2014 | 2015 | 2016 | 2017 | Condition |
|---|------|------|------|------|-----------|
| 1 | PT. Matahari | 29%  | 23%  | 25%  | 23% | Good |
| 2 | PT Ramayana  | 5%   | 4%   | 6%   | 6%  | Bad  |
| 3 | PT Hero      | 0%   | -6%  | 1%   | -1% | Bad  |

In company operating profit level through sales activity in Table 41 in 2017 of the three companies is low between 6% and 23%.

Table 42. Operating ratio - Cost of goods sold + expenses : Sales

|   | 2014 | 2015 | 2016 | 2017 | Condition |
|---|------|------|------|------|-----------|
| 1 | PT. Matahari | 73%  | 67%  | 74%  | 75% | Good |
| 2 | PT Ramayana  | 81%  | 95%  | 97%  | 93% | Good |
| 3 | PT Hero      | 101% | 101% | 100% | 102%| Good |

Measuring cost of goods and operational expenses compared to sales activity. In Table 42 Operating ratio of the three companies year to year is adequately stable between 74% and 102%.

Table 43. Net profit margin - Profit after tax : Sales

|   | 2014 | 2015 | 2016 | 2017 | Condition |
|---|------|------|------|------|-----------|
| 1 | PT. Matahari | 17%  | 19%  | 20%  | 19% | Good |
| 2 | PT Ramayana  | 6%   | 5%   | 7%   | 8%  | Good |
| 3 | PT Hero      | 0%   | 0%   | 0%   | -1% | Bad  |

Net profit margin is ability of the company to earn net profit through sales. In Table 43 net profit margin PT Matahari is stable. PT Ramayana and PT Hero are minimum.

Table 44. Earning power total investment - Profit after tax : Total assets

|   | 2014 | 2015 | 2016 | 2017 | Condition |
|---|------|------|------|------|-----------|
| 1 | PT. Matahari | 41%  | 45%  | 41%  | 35% | Good |
| 2 | PT Ramayana  | 7%   | 7%   | 8%   | 8%  | Good |
| 3 | PT Hero      | 0%   | -1%  | 2%   | -2% | Bad  |

In Table 44 the level of assets return through net profit before tax of PT Matahari in 2017 was 35%, for the second time, the other two is low.

Table 45. Net earning power ratio - Profit after tax : Total assets

|   | 2014 | 2015 | 2016 | 2017 | Condition |
|---|------|------|------|------|-----------|
| 1 | PT. Matahari | 41%  | 45%  | 41%  | 35% | Good |
| 2 | PT Ramayana  | 7%   | 7%   | 8%   | 8%  | Bad  |
| 3 | PT Hero      | 0%   | -1%  | 2%   | -2% | Bad  |
The level of assets return through net profit after tax for PT Matahari in 2017 was 35%, for PT Ramayana and PT Hero is low about 0–8% as seen in Table 45.

### Table 46. Rate of return for owner's lababersih sesudah pajak: Modal sendiri

|       | 2014 | 2015 | 2016 | 2017 | Condition |
|-------|------|------|------|------|-----------|
| 1     | 890% | 160% | 108% | 81%  | Good      |
| 2     | 10%  | 10%  | 12%  | 11%  | Bad       |
| 3     | 10%  | -1%  | 2%   | -1%  | Bad       |

Net profit after tax compared to self-capital PT. Matahari in 2014 to 2017 was decreasing, the ability of PT Ramayana and PT Hero was still low around 0-12% as seen in Table 46.

b. Stock analysis

The calculation result of stock analysis is good (earning per share is good, price earnings ratio is good, dividend per share is good, dividend yield is good, book value is good) as seen in Table 47-51

### Table 47. Earning per share - Earning after tax: Number of shares

|       | 2014 | 2015 | 2016 | 2017 | Condition |
|-------|------|------|------|------|-----------|
| 1     | 709  | 890  | 1.009| 953  | Good      |
| 2     | 50   | 48   | 58   | 58   | Good      |
| 3     | 15   | -20  | 38   | -47  | Bad       |

Earnings per share is measuring the company ability to earn profit per share, in Table 47 earnings per share PT Matahari and PT Ramayana in 2017 between 58 - 953 which means the company is still able to earn profit per share and PT. Hero is minus.

### Table 48. Price earning ratio - Stock market price: Earning per share

|       | 2014 | 2015 | 2016 | 2017 | Condition |
|-------|------|------|------|------|-----------|
| 1     | 26   | 19   | 15   | 18   | Good      |
| 2     | 15   | 13   | 20   | 26   | Good      |
| 3     | 15   | -20  | 38   | 47   | Good      |

Price earnings ratio describing company profit to stock price shows that refunding level is fluctuating, for the three companies price earnings ratio 2016 and 2017 is still good where the stock price is stable can be seen in Table 48

### Table 49. Dividend per share - Dividen payment by cash: Number of shares outstanding

|       | 2014 | 2015 | 2016 | 2017 | Condition |
|-------|------|------|------|------|-----------|
| 1     | 230  | 425  | 623  | 707  | Good      |
| 2     | 30   | 46   | 58   | 34   | Good      |
| 3     | 75   | 50   | 25   | 0    | Bad       |

Dividend per share measures the refund level of dividend given by the company to the stockholders. in Table 49 in 2017 dividend per share of PT. Matahari and PT Ramayana was about 34-707 which means it still can give dividend per share circulated. PT Hero was no longer able to share its dividend.

### Table 50. Dividend Yeild - Dividen per share; Stock market Price

|       | 2014 | 2015 | 2016 | 2017 | Condition |
|-------|------|------|------|------|-----------|
| 1     | 1%   | 24%  | 40%  | 4%   | Bad       |
| 2     | 37%  | 7%   | 4%   | 22%  | Good      |
| 3     | 3%   | 4%   | 2%   | 0    | Bad       |
Dividend yield measures the level of dividend share given per stock share compared to circulated stock market price. In Table 50 dividend yield of the three companies fluctuated in 2017 is between 4% – 22%.

|     | 2014 | 2015 | 2016 | 2017 | Condition |
|-----|------|------|------|------|-----------|
| 1   | PT.Matahari | 79   | 553  | 927  | 1.188     | Good     |
| 2   | PT.Ramayana | 479  | 1.666| 1.668| 1.747     | Good     |
| 3   | PT.Hero     | 1.363| 1.303| 1.364| 1.299     | Good     |

**Table 51. Book value - Owner’s equity : Number of shares outstanding**

In Table 51 self capital compared to circulated stock number every year has increased which means capital increase is also followed by the increase of circulated stock number.

c. **Z score**

The calculation result of z-score analysis is in good condition as seen in Table 26 the condition of financial performance from 2014 to 2017 where Z score in the table > 0.862, that means the company financial performance is good.

**Research results**

Descriptive research result shows calculation’s is bad toward the items of research variables and this needs to be corrected, namely are :

1. The ratio analysis of industry retail such as working capital to assets, operating income ratio and net profit margin, earning power to total investment, net earning power ratio rate of return for owner’s

2. The stock analysis of industry retail such as dividend yield

**Conclusion**

The conclusion of this study is hypotheses test based on empirical data is proven to be good. There are that are proven with the ratio analysis result toward retail industry financial report performance is proven to be good (except profit), the stock analysis toward retail industry financial report performance is proven to be good, and z score analysis result toward retail industry financial report performance is proven to be good.

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