

## The Prospect of Retail Industry Growth in Indonesia

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### Abstract

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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. .

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**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.

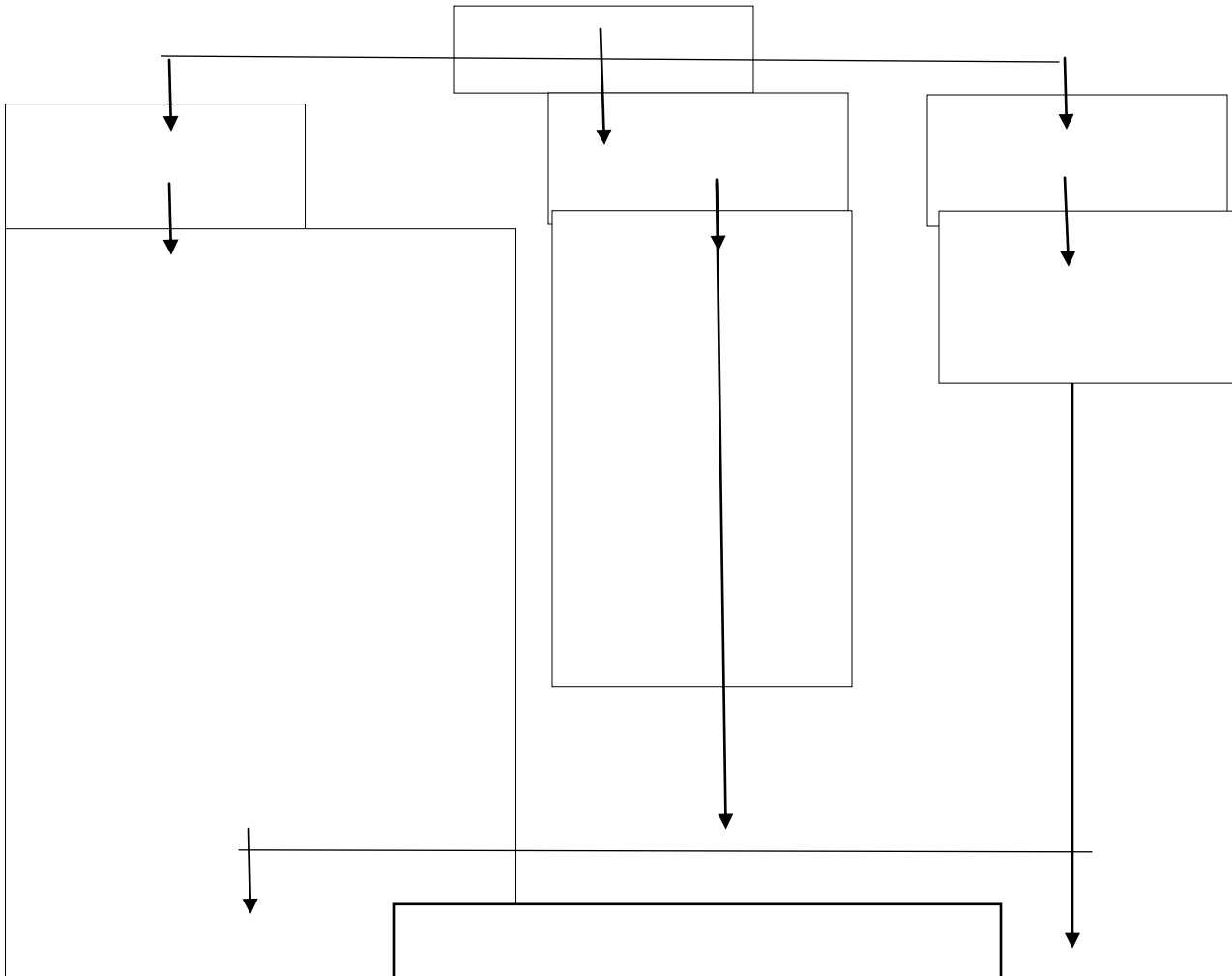
**3. The condition of retail industry financial report measured by Z-score**

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 1.

Figure 1.



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 – 4**

**Table 1. Current ratio -Curent assets : Current liability (millions)**

		2014	2015	2016	2017
1	PT.Matahari	84 % <u>2.117.507</u> 2.518.521	96 % <u>2.272.941</u> 2.439.014	115% <u>2.974.052</u> 2.588.354	113% <u>2.973.749</u> 2.610.824
2	PT Ramayana	278 % <u>2.694.944</u> 967.544	294% <u>3.831.172</u> 960.890	280% <u>2.830.815</u> 1.008.981	295 % <u>3.093.496</u> 1.048.640
3	PT.Hero	117% <u>3.283.248</u> 2.788.133	121% <u>3.156.943</u> 2.608.222	142% <u>2.817.240</u> 1.970.941	127 % <u>2.544.725</u> 2.001.461

**Table 2. Cash ratio** -Cash : Current liability( millions)

		2014	2015	2016	2017
1	PT. Matahari	31% <u>785.895</u> 2.518.521	38 % <u>946.658</u> 2.439.014	66 % <u>1.712.844</u> 2.588.354	60% <u>1.582.817</u> 2.610.824
2	PT.Ramayana	170 % <u>625.373 + 1.026.105</u> 967.544	190 % <u>844.253 + 984.004</u> 960.890	174 % <u>603.750+1.156.855</u> 1.008.981	193% <u>751.901 + 1.279.068</u> 1.048.640
3	PT Herro	7% <u>196.533</u> 2.788.133	5 % <u>147.310</u> 2.608.222	9 % <u>183.189</u> 1.970.941	11 % <u>226.399</u> 2.001.401

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

		2014	2015	2016	2017
1	PT. Matahari	46% <u>2.111.507- 955.231</u> 2.518.521	47 % <u>2.272.741- 1.107.811</u> 2.439.014	76 % <u>2.974.052- 995.278</u> 2.588.354	75% <u>2.973.745- 1.005.484</u> 2.610.824
2	PT.Ramayana	195 % <u>2.694.944 – 808.071</u> 967.544	209% <u>2.831.172- 823.909</u> 960.890	198 % <u>2.830.815 – 834.400</u> 1.008.981	214 % <u>3.093.496 – 740.993</u> 1.098.640
3	PT Herro	36 % <u>3.283.248 – 2.271.544</u> 2.788.133	55% <u>3.516.943 – 2.059.544</u> 2.608.222	43 % <u>2.817.240-1.961.664</u> 1.970.941	46 % <u>2.544.725- 1.616.534</u> 2.001.401

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

		2014	2015	2016	2017
1	PT. Matahari	-11 % <u>2.117.507-2.518.521</u> 3.421.954	-4 % <u>2.272.741-2.439.014</u> 3.889.291	7 % <u>2.974.052-2.588.354</u> 4.858.878	6 % <u>2.973.749-2.610.824</u> 5.427.426
2	PT.Ramayana	37 % <u>2.694.944 – 967.544</u> 4.554.667	40 % <u>2.831.172 – 960.890</u> 4.574.904	39% <u>2.830.815- 1.008.981</u> 4.647.009	41 % <u>3.093.496 – 1.048.640</u> 4.891.922
3	PT Herro	6 % <u>3.283. 248 – 2.788.133</u> 8.295.642	7% <u>3.156.943 – 2.608.222</u> 8.042.797	11% <u>2.817.240- 1.970.941</u> 7.487.033	7% <u>2.544.25 – 2.001.461</u> 7.363.144

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

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

		2014	2015	2016	2017
1	PT.Matahari	2.168 % <u>3.253.691</u> 150.263	251 % <u>2.783.124</u> 1.106.167	161 % <u>3.003.635</u> 1.855.243	95 % <u>3.099.441</u> 2.327.965
2	PT Ramayana	35 % <u>1.195.220</u> 3.359.447	37 % <u>1.241.100</u> 3.333.804	39% <u>1.309.610</u> 3.337.392	40 % <u>1.397.577</u> 3.494.345
3	PT Hero	52% <u>2.841.822</u> 5.453.820	54 % <u>2.828.419</u> 5.214.378	37 % <u>2.029.250</u> 5.457.783	41 % <u>2.164.401</u> 5.198.743

**Table 6. Debt ratio - Total liability : Total assets (millions )**

		2014	2015	2016	2017
1	PT.Matahari	95 % <u>3.253.691</u> 3.421.954	71 % <u>2.783.124</u> 3.889.291	62 % <u>3.003.635</u> 4.858.878	57 % <u>3.099.441</u> 5.427.426
2	PT Ramayana	26 % <u>1.195.270</u> 4.554.667	27 % <u>1.241.100</u> 4.574.904	29 % <u>1.309.610</u> 4.467.009	28 % <u>1.397.677</u> 4.891.922
3	PT Hero	34 % <u>2.841.822</u> 8.295.642	32 % <u>2.828.419</u> 8.042.797	27 % <u>2.029.250</u> 7.487.033	29 % <u>2.164.401</u> 7.363.144

**Table7.Long term debt equity ratio - Long term liability : Equity**

		2014	2015	2016	2017
1	PT . Matahari	462% <u>753.170</u> 159.263	31% <u>344.110</u> 1.106.167	22% <u>415.281</u> 1.855.243	20 % <u>488.617</u> 2.377.965
2	PT Ramayana	8 % <u>272.676</u> 3.359.447	8 % <u>280.210</u> 3.333.804	9 % <u>300.629</u> 3.337.399	10 % <u>348.937</u> 3.494.345
3	PT Hero	0 % <u>53.689</u> 5.453.820	4 % <u>220.197</u> 5.214.378	1 % <u>58.309</u> 5.457.783	3 % <u>162.940</u> 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 <u>1.850.544</u> 169.097	30 X <u>2.244.621</u> 73.702	230 X <u>2.532.666</u> 11.750	159 X <u>2.396.300</u> 15.474
2	PT Ramayana	0 <u>388.124</u> 0	0 <u>364.620</u> 0	0 <u>465.065</u> 0	0 <u>466.592</u> 0
3	PT Hero	6.8 X <u>68.443</u> 10.181	-3 X <u>(91.184)</u> 27.870	6.8 X <u>184.449</u> 27.712	- 62 X <u>(251.647)</u> 4.494

3. The result of activity ratio can be seen in **Table9 - 13**

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

		2014	2015	2016	2017
1	PT. Matahari	2.3 X <u>7.925.547</u> 3.421.954	2.3 X <u>9.006.893</u> 3.889.291	2 X <u>9.897.046</u> 4.858.878	1.8 X <u>10.023.961</u> 5.427.426
2	PT Ramayana	1.28 X <u>5.861.348</u> 4.554.667	1.2 X <u>5.533.004</u> 4.467.009	1.2 X <u>5.857.037</u> 4.647.009	1.1 X <u>5.622.728</u> 4.891.922
3	PT Hero	1.53 X <u>12.768.973</u> 8.295.642	1,78 <u>14.352.700</u> 8.042.797	1.82 X <u>13.677.931</u> 7.487.033	1.77 X <u>13.033.638</u> 7.363.144

**Table 10. Receivable turn over - Sales : Average of receivable (millions )**

		2014	2015	2016	2017
1	PT.Matahari	176 X <u>7.925.547</u> 45.063	230 X <u>9.006.893</u> 39.312	135 X <u>9.897.046</u> 73.137	74 X <u>10.023.961</u> 134.278
2	PT Ramayana	2.930 X <u>5.861.348</u> 2.590	1.844X <u>5.533.004</u> 3.652	488 X <u>5.857.037</u> 12.025	562 X <u>5.622.728</u> 10.046
3	PT Hero	36 X <u>12.768.973</u> 352.396	36 X <u>14.362.700</u> 390.900	63 X <u>13.677.931</u> 214.262	47 X <u>13.033.638</u> 273.970

**Table 11. Average collection periode - (Receivable X 360) : Sales**

		2014	2015	2016	2017
1	PT.Matahari	2,04 hari <u>45.063 X 360</u> 7.925.547	1,57 hari <u>39.312 X 360</u> 9.006.893	2,66 hari <u>73.137 X 360</u> 9.897.046	4,82 hari <u>134.278 X 360</u> 10.023.961
2	PT Ramayana	0,16 hari <u>2.590 X360</u> 5.861.348	0,23 hari <u>3.652 X 360</u> 5.533.004	0,73 hari <u>12.025 X 360</u> 5.857.037	0,64 hari <u>10.046 X 360</u> 5.622.728
3	PT Hero	9.9 hari <u>352.396 X360</u> 12.768.973	9.7 hari <u>390.900 X360</u> 14.362.700	5,6 hari <u>214.262 X360</u> 13.677.931	7.56 hari <u>273.970 X 360</u> 13.033.638

**Table 12. Inventory turn over - Cost of good : Inventory**

		2014	2015	2016	2017
1	PT.Matahari	3 X <u>2.877.507</u> 955.231	3 X <u>3.335.638</u> 1.007.811	3,1 X <u>3.085.279</u> 995.278	3,7 X <u>3.762.021</u> 1.005.484
2	PT.Ramayana	4,7 X <u>3.813.511</u> 808.569	4,2 X <u>3.537.000</u> 823.909	4,3 X <u>3.654.539</u> 834.400	4,6 X <u>3.410.434</u> 740.993
3	PT.Hero	4,2 X <u>9.743.041</u> 2.271.071	5,3 X <u>11.026.182</u> 2.052.544	5,1 X <u>10.107.503</u> 1.961.664	5,9 X <u>9.591.191</u> 1.616.534

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

		2014	2015	2016	2017
1	PT.Matahari	199 hari <u>955.231 X 360</u> 2.877.507	108 hari <u>1.007.811 X 360</u> 3.335.638	116 hari <u>995.276 X 360</u> 3.085.279	98 hari <u>1.025.484 X360</u> 3.762.021
2	PT.Ramayana	76 hari <u>808.569 X360</u> 3.813.511	83 hari <u>823.909X360</u> 3.537.000	82 hari <u>834.400 X360</u> 3.634.539	78 hari <u>740.993 X360</u> 3.410.434
3	PT.Hero	84 hari <u>2.271.544X360</u> 9.743.041	67 hari <u>2.052.544X360</u> 11.026.182	69 hari <u>1.961.664X360</u> 10.107.503	60 hari <u>1.616.534X360</u> 9.591.191

4. The result of profitability ratio can be seen in **Table14 - 20**

**Table 14. Gross margin ratio -Gross profit : Sales( millions )**

		2014	2015	2016	2017
1	PT. Matahari	73 % <u>5.048.040</u> 7.925.547	62 % <u>5.671.255</u> 9.006.893	62 % <u>6.211.767</u> 9.897.046	62 % <u>6.261.940</u> 10.023.961
2	PT Ramayana	34 % <u>2.047.837</u> 5.861.348	35 % <u>1.996.604</u> 5.533.004	34 % <u>2.002.498</u> 5.857.037	39% <u>2.212.294</u> 5.622.728
3	PT Hero	23% <u>3.025.932</u> 12.768.973	23% <u>3.326.518</u> 14.352.799	26% <u>3.570.428</u> 13.677.931	26% <u>3.442.447</u> 13.033.638

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

		2014	2015	2016	2017
1	PT.Matahari	29 % <u>2.337.648</u> 7.925.543	23 % <u>2.083.912</u> 9.006.893	25% <u>2.533.911</u> 9.877.046	23 % <u>2.376.663</u> 10.023.961
2	PT Ramayana.	5% <u>298.412</u> 5.581.344	4% <u>250.694</u> 5.533.004	6% <u>368.154</u> 5.857.037	6 % <u>368.784</u> 5.622.728
3	PT Hero	0% <u>68.443</u> 12.708.973	-6 % <u>(91.184)</u> 14.352.700	1% <u>184.449</u> 13.671.931	- 1% <u>(251.647)</u> 13.033.638

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

		2014	2015	2016	2017
1	PT.Matahari	73 % <u>2.877.507</u> <u>+2.937.013</u> 7.925.537	67 % <u>3.335.638 +3.341.741</u> 9.006.893	74 % <u>3.665.276 +3.683.671</u> 9.877.046	75% <u>3.762.021 +3.852.799</u> 10.023.961
2	PT Ramayana	81 % <u>3.813.311</u> <u>+399.364+1.354.967</u> 5.581.348	95 % <u>3.537.000+385.212+1.377.266</u> 5.533.004	97 % <u>3.634.539+408.190+1.436.917</u> 5.857.037	93 % <u>3.410.434+379.456+1.476.485</u> 5.622.728
3	PT Hero	101 % <u>9.743.071</u> + <u>3.199.396</u> 12.708.973	101 % <u>11.026.182+3.572.879</u> 14.352.700	100 % <u>10.107.503+3.604.301</u> 13.077.931	102 % <u>9.591.191 + 3.766.137</u> 13.033.638

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

		2014	2015	2016	2017
1	PT.Matahari	17 % <u>1.419.116</u> 7.925.547	19 % <u>1.780.848</u> 9.006.893	20% <u>2.019.705</u> 9.877.040	19 % <u>1.907.077</u> 10.023.961
2	PT.Ramayana	6% <u>355.075</u> 5.861.348	5% <u>336.054</u> 5.533.004	7% <u>408.479</u> 5.857.037	8 % <u>406.580</u> 5.622.728
3	PT.Hero	0 <u>63.655</u> 12.768.973	0 <u>(82.222)</u> 14.352.700	1% <u>152.281</u> 13.671.931	-1% <u>(191.406)</u> 13.633.638

**Table 18. Earning power total investment Profit before tax : Total assets**

		2014	2015	2016	2017
1	PT.Matahari	54 % <u>1.850.544</u> 3.412.954	57 % <u>2.244.821</u> 3.889.291	52 % <u>2.532.66</u> 4.858.878	44 % <u>2.396.300</u> 5.427.426
2	PT.Ramayana	8 % <u>388.124</u> 4.554.667	5 % 264.620 4.574.904	10 % <u>465.065</u> 4.647.009	9 % <u>466.592</u> 4.891.922
3	PT.Hero	0 63.655 8.295.642	- 1 % <u>(82.222)</u> 8.042.797	2 % <u>184.449</u> 7.487.033	- 3 % <u>(251.647)</u> 7.363.144

**Table 19 .Net earning power ratio - Profit after tax :Total assets**

		2014	2015	2016	2017
1	PT.Matahari	41 % <u>1.419.116</u> 3.412.954	45% <u>1.780.848</u> 3.889.291	41 % <u>2.019.705</u> 4.858.878	35 % <u>1.907.077</u> 5.427.426
2	PT.Ramayana	7 % <u>355.075</u> 4.554.667	7 % <u>336.054</u> 4.574.904	8 % <u>408.479</u> 4.647.009	8 % <u>406.580</u> 4.891.922
3	PT.Hero	0 <u>63.655</u> 8.295.642	- 1 % <u>(82.222)</u> 8.042.797	2 % <u>152.281</u> 7.487.033	- 2 % <u>(191.406)</u> 7.363.144

**Table 20. Rate of return for owner's - Profit after tax : Owner's**

		2014	2015	2016	2017
1	PT.Matahari	890 % <u>1.419.116</u> 159.263	160 % <u>1.780.848</u> 1.106.167	108 % <u>2.019.705</u> 1.855.243	81 % <u>1.907.077</u> 2.327.985
2	PT.Ramayana	10 % <u>355.075</u> 3.359.447	10 % <u>336.054</u> 3.333.804	12 % <u>408.479</u> 3.337.399	11 % <u>406.580</u> 3.494.345
3	PT.Hero	1 0 <u>63.655</u> 5.453.820	- 1 % <u>(82.222)</u> 5.214.378	2 % <u>152.281</u> 5.457.783	- 3 % <u>(191.406)</u> 5.198.743

**b. Analisa Saham**

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

**Table 21. Earning per share -Earning after tax : Number of shares**

		2014	2015	2016	2017
1	PT.Matahari	709 <u>1.419.116</u> 2.917	890 <u>1.780.848</u> 2.917	1.009 <u>2.019.705</u> 2.917	953 <u>1.907.077</u> 2.917
2	PT.Ramayana	50 <u>355.075</u> 7.096	48 <u>336.054</u> 7.096	58 <u>408.479</u> 7.096	58 <u>406.580</u> 7.096
3	PT.Hero	15 <u>63.655</u> 4.183	- 20 % <u>(82.222)</u> 4.183	38 % <u>152.281</u> 4.183	- 47 % <u>(191.406)</u> 4.183



**Table 22. Price earning ratio - Stock market price : Earning per share**

		2014	2015	2016	2017
1	PT.Matahari	26 <u>15.000</u> 709	19 <u>17.600</u> 890	15 <u>15.125</u> 1.009	18 <u>17.100</u> 953
2	PT.Ramayana	15 <u>790</u> 50	13 <u>645</u> 48	20 <u>1.195</u> 58	26 <u>1.510</u> 58
3	PT.Hero	15 <u>2.380</u> 15	-20 <u>1.150</u> - 20	38 <u>1.260</u> 38	47 <u>920</u> -47

**Table 23. Devidend per share -Deviden payment by cash : Number of shares outstanding**

		2014	2015	2016	2017
1	PT.Matahari	230 <u>460156</u> 2.917	425 <u>851.448</u> 2.917	623 <u>1.246.826</u> 2.917	707 <u>1.414.023</u> 2.917
2	PT.Ramayana	30 <u>212.880</u> 7.096	46 <u>327.428</u> 7.096	58 <u>410.544</u> 7.096	34 <u>242.021</u> 7.096
3	PT.Hero	75 <u>300.00</u> 4.183	50 <u>200.000</u> 4.183	25 <u>100.000</u> 4.183	0 <u>0</u> 4.183

	Matahari				Ramayana				Hero			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017

**Table 24. Devidend Yeild - Deviden per share: Stock market price**

		2014	2015	2016	2017
1	<u>PT Matahari</u>	1% <u>230</u> 15.000	24% <u>425</u> 17.600	4% <u>623</u> 15.125	4% <u>707</u> 17.100
2	<u>PT Ramayana</u>	37% <u>30</u> 790	7% <u>46</u> 645	4% <u>623</u> 15.125	22% <u>707</u> 17.100
3	<u>PT Hero</u>	3% <u>75</u> 2.380	4% <u>50</u> 1.150	2% <u>25</u> 1.260	0 <u>0</u> 920

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

		2014	2015	2016	2017
1	<u>PT Matahari</u>	79 <u>159.263</u> 2.917	553 <u>1.106.167</u> 2917	927 <u>1.855.243</u> 2.917	1.188 <u>2.377.965</u> 2.917
2	<u>PT Ramayana</u>	479 <u>3.359.447</u> 7.096	1.666 <u>3.333.804</u> 2.917	1.668 <u>3.337.399</u> 2.917	1.747 <u>3.494.345</u> 2.917
3	<u>PT Hero</u>	1.363 <u>5.453.820</u> 4.183	1.303 <u>5.214.378</u> 4.183	1.364 <u>5.457.783</u> 4.183	1.299 <u>5.198.743</u> 4.183

**Analisa Z-score**

a. The result of z-score analysis can be seen in Table 26.

Current assets	2.111.327	2.272.741	2.974.000	2.973.745	2.694.94	3.283.248	2.830.815	2.093.496	3.283.248	3.156.943	2.817.240	2.544.725
Current liability	2.518.521	2.439.014	2.566.354	2.610.824	967.594	960.890	970.940	1.048.640	2.788.133	2.608.222	1.970.948	2.001.461
Working Capital	(407.014 )	(166.273 )	407.651	362.921	1.737.400	1.870.282	1.821.834	1.044.856	495.115	548.721	846.292	543.264
Total assets	3.421.954	3.889.291	4.858.878	5.427.426	4.565.923	4.574.904	4.647.009	4.891.922	8.295.642	8.042.797	7.487.033	7.363.144
A	-0,11	- 0,04	0,08	0,66	0,37	0,40	0,39	0,21	0,05	0,06	0,11	0,07
Earning before tax	1.850.546	2.244.821	3.532.666	2.395.300	388.909	364.904	465.085	466.592	68.443	(91.184)	152.281	(191.406 )
Total assets	3.421.954	3.889.291	4.858.878	5.427.426	4.585.923	4.574.904	4.647.009	4.891.922	8.295.642	8.042.797	7.487.033	7.363.144
B	0,54	0,57	0,72	0,44	0,08	0,07	0,1	0,09	0,008	-0,011	0,02	0,09
Earning before tax	1.850.546	2.244.821	3.532.666	2.395.300	388.909	364.620	465.085	466.592	68.443	(91.184)	152.281	(191.406 )
Current liability	2.518.521	2.439.014	2.566.354	2.610.824	967.544	960.893	1.008.981	1.408.640	2.788.133	2.608.222	1.970.948	2.001.461
C	0,73	0,92	1,97	0,91	0,40	0,37	0,46	0,33	0,02	-0,03	0,07	0,09
Sales	7.925.453	9.006.893	9.877.048	10.023.967	5.861.348	5.533.004	5.857.037	5.622.728	12.768.973	14.352.700	13.667.931	13.033.638
Total assets	3.421.954	3.889.291	4.858.878	5.427.426	4.565.923	4.574.904	4.647.009	4.891.922	8.295.642	8.042.797	7.487.033	7.363.144
D	2,31	2,31	2,03	1,84	1,28	1,20	1,26	1,14	1,53	1,78	1,82	1,77
Z -Score (A+B+C+D)	3,67	3,67	4,80	3,85	2,13	2,04	2,21	1,77	1,60	1,7	2,02	1,99
Company condition Z -score > 0.862	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good

### **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 -Curent 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,- guaranteed by current liabilities Rp.2,95 ,-

**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,- guaranteed by cash Rp 1.93 by PT Ramayana, PT Matahari and PT Hero cash ability to pay for the debt is between 11 % to 60 %.

**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 termdebt 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, average collection period is good, inventory turnover is good, average days inventory is good) **Table 35 – 39**.

**Table 35. 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 Assetturnover of the three companies had no significant change which mean sales and company assets also had no significant change.

**Table 36. Receivable turn over** -Sales : 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 periode** - (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** in 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.Marahari	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	PT.Matahari	890%	160%	108%	81%	Good
2	PT.Ramayana	10%	10%	12%	11%	Bad
3	PT.Hero	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	PT.Matahari	709	890	1.009	953	Good
2	PT.Ramayana	50	48	58	58	Good
3	PT.Hero	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	PT.Matahari	26	19	15	18	Good
2	PT.Ramayana	15	13	20	26	Good
3	PT.Hero	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. Devidend per share-** Deviden payment by cash : Number of shares outstanding

		2014	2015	2016	2017	Condition
1	PT.Matahari	230	425	623	707	Good
2	PT.Ramayana	30	46	58	34	Good
3	PT.Hero	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 Ramayanawas 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. Devidend Yeild** -Deviden per share ; Stock market Price

		2014	2015	2016	2017	Condition
1	PT.Matahari	1%	24%	40%	4%	Bad
2	PT.Ramayana	37%	7%	4%	22%	Good
3	PT.Hero	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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