Hospitality And Tourism Industry Performance in Indonesia Based on Benjamin Graham’s Perspective

Ima Kristina Yulita¹ and Caecilia Wahyu Estining Rahayu²
Economic Faculty, Sanata Dharma University, Yogyakarta, Indonesia¹
Economic Faculty, Sanata Dharma University, Yogyakarta, Indonesia²

Abstract. This research aims at determining the performance of hospitality and tourism industry in Indonesia based on the analysis of financial ratios using the Benjamin Graham’s perspective. The total number of samples is 9 companies listed in Indonesia Stock Exchange in 2012-2016. The analysis of financial ratios includes Earning Per-Share (EPS), Price to Earnings Ratio (PER), Price to Book Value (PBV), Return on Equity (ROE), Current Ratio (CR) and Debt to Equity Ratio (DER). First, this research examined the effects of those six financial ratios on stock prices either partially or simultaneously. Afterwards, only financial ratios that had a significant effect on stock prices are analyzed using Benjamin Graham. Hypothesis testing was conducted using Multiple Linear Regression analysis. The results point out that: (1) EPS, PER, PBV, ROE, CR and DER simultaneously affect the stock prices; (2) EPS, PER, PBV and DER partially affect the stock prices; (3) Seven companies that meet 2 of 4 determined criteria are ARTA, BAYU, JIHD, JSPT, KPIG, PDES and SHID. The results of this research are expected to provide recommendations for investors in selecting companies’ shares with good performance based on 4 financial ratios.

Keywords: Hospitality and tourism industry, financial ratio, financial performance, stock prices, Benjamin Graham.

1. INTRODUCTION

Based on 2016 Performance Report of the Ministry of Tourism (www.kemenpar.go.id, 2018), Indonesia with the branding of Wonderful Indonesia has improved its position (47th), higher than Malaysia (96th) and Thailand (83rd), in the list. According to the Ministry of Tourism (www.kemenpar.go.id, 2017), the tourism sector has provided significant contribution to the improvement of Indonesia’s foreign exchange income - from the 5th position in 2011 and 2012 to the 4th in 2013, 2014 and 2015, and to the 2nd in 2016. In addition, the contribution of tourism sector to the national GDP of 2016 reached the number of Rp176-184 trillion and provided employment for 12 million people in 2016 (kemenpar.go.id, 2018). Consequently, these numbers encourages potential investors to make investment in the sector of tourism by investing in the capital market - buying shares of companies in the hospitality and tourism industries.

One of the approaches to stock investing is fundamental analysis. For potential investors, fundamental analysis is one of the ways to obtain insights on a company performance which is conducted by reviewing financial report published by the company (Subramaniam, 2014). According to Sudana (2015), determining the strengths and weaknesses of a company
requires analysis on the financial statement, including evaluation on the performance record of the company’s management and put it into consideration in the preparation of future plans in company level. Fundamental analysis is a mean to understand stock’s performance as the by determining whether certain securities are “worth buying” or “worthy selling” based on analysis on financial statements (Samsul, 2015).

In conducting fundamental analysis, the implementation of financial ratios analysis includes several financial ratios, such as market value ratio, profitability ratio, liquidity ratio and solvency ratio (Subramanyam, 2014; Sudana, 2015; Frensidy, 2016). According to Tandelilin (2017), investors need to pay attention to EPS (Earning Per Share), PER (Price to Earnings Ratio) and PBV (Price to Book Value) of a company in their fundamental analysis since EPS, PER and PBV are employed in the estimation of the intrinsic value of shares. ROE (Return on Equity) determines the ability of a company to generate profit after taxes using company’s capital (Sudana, 2015). Higher ROE indicates higher efficiency in the use of company’s capital. Current Ratio (CR) is one of the liquidity ratios that measure the ability of a company in paying current debts using company’s own assets (Sudana, 2015). Higher CR indicates better ability in paying meet short-term debt using company’s own assets. Debt Equity Ratio (DER) is one of the solvency ratios that suggest the number of company operations supported with debt compared to the number of company operations supported with the company’s own capital (Sari and Kennedy, 2017).

The result of the research by Kohansal et al. (2013) shows that financial ratios, such as ROE, CR, Financial Leverage and Asset Turnover, are significantly related to stock prices of the companies in food industry. Miri and Abrahimi’s research (2011) shows that there is a significant relationship between financial ratios and stock prices. Hashemi and Behzadfar (2011) in their research find that EPS, working capital to assets, ROA (Return on Assets), net profit and sales turnover affect stock prices. According to Asri (2017), EPS and ROA have positive effects on stock prices, which mean that every increase in EPS and ROA raises the stock price. Andy (2016) finds that changes in PER and DY (dividend yield) correlates with stock prices, whether in short term or long term. Changes in DY have positive
correlation with changes in stock prices, while changes in PER have negative correlation. Artha et al. (2014) finds that Book Value per Share (BVS), PBV, DER, stock price trends, BI rate, world oil prices and Rupiah exchange rate had a significant effect on agricultural stock price. The result of the research by Prasetyo (2014) on 15 hospitality and tourism companies listed on Indonesia Stock Exchange (IDX) in 2010-2012 indicates that financial performance has significant effects on stock prices, and that there are variations in terms of stock prices for healthy and unhealthy companies. The result of the research by Sari and Kennedy (2017) shows that ROE has negative effects on stock prices, DER has negative effects on stock prices and PER has positive effects on stock prices but EVA does not have positive effects on stock prices.

Researches on financial performance have also been conducted in other countries. The research by Kohansal et al. (2013) shows that financial ratios, such as ROE, Current Ratio, Financial Leverage and Asset Turnover, are significantly related to stock prices of the companies in food industry in Iran. Miri and Abrahimi (2011) find that there is a significant relationship between financial ratios and stock prices in Iran. The research by Hashemi and Behzadfar (2011) finds that EPS, working capital to assets, ROA, net profit and sales turnover affect stock prices. Esmaeli (2002) finds that there is a significant correlation between financial ratios and stock prices. Based on above theory and researches, hypotheses are formulated as follows:

H1: EPS, PER, PBV, ROE, CR, and DER partially have significant effects on stock prices of the companies in hospitality and tourism sub-sectors.

H2: EPS, PER, PBV, ROE, CR, and DER simultaneously have significant effects on stock prices of the companies in hospitality and tourism sub-sectors.

3. METHOD

The population in this research is all companies in hospitality and tourism sub-sectors listed on Indonesia Stock Exchange in 2012-2016, which is 17 companies. The samples were chosen using purposive sampling method. The selected companies are 9 companies with positive record of profit, which is set as the criterion, during the research period. The following is the list of the selected 9 companies in hospitality and tourism sub-sectors that are the samples of this research.

Table 1. The List of The Companies in Hospitality and Tourism sub-sectors

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ARTA</td>
<td>PT Artavest Tbk.</td>
</tr>
<tr>
<td>2</td>
<td>BAYU</td>
<td>PT Bayu Buana Travel Service</td>
</tr>
<tr>
<td>3</td>
<td>INPP</td>
<td>PT Indonesian Paradise Property Tbk</td>
</tr>
<tr>
<td>4</td>
<td>ICON</td>
<td>PT Island Concepts Indonesia Tbk</td>
</tr>
<tr>
<td>5</td>
<td>JIHD</td>
<td>PT Jakarta Internasional Hotels and Development Tbk</td>
</tr>
<tr>
<td>6</td>
<td>JSPT</td>
<td>PT Setiabudi Internasional Tbk</td>
</tr>
<tr>
<td>7</td>
<td>KPIG</td>
<td>PT MNC Land Tbk</td>
</tr>
<tr>
<td>8</td>
<td>PDES</td>
<td>PT Destinasi Tirta Nusantara Tbk</td>
</tr>
<tr>
<td>9</td>
<td>SHID</td>
<td>PT Hotel Sahid Jaya Internasional Tbk</td>
</tr>
</tbody>
</table>

Source: www.idx.co.id

The data used in this research are secondary data in the form of annual closing stock price data and annual financial statements in 2012-2016 (www.idx.co.id). The dependent variable in this research is stock prices. Stock prices are measured at the closing price of each stock at the end of each year within the period of 2012-2016. The independent variables in this research are as follows:

Earning per Share (EPS). This ratio measures the net income per outstanding share. The formula is:

\[ EPS = \frac{\text{net profit}}{\text{the number of outstanding common shares}} \]

According to Graham (2017), company with performance is the one with > 30% long-term EPS growth (previous 10 years), and has no negative EPS for the last 5 years.

Price to Earnings Ratio (PER). This ratio measures investors’ assessment of the company’s future prospects and is reflected in the share price that investors are willing to pay for profit earned by the company (Sudana, 2015). The formula is:

\[ PER = \frac{\text{market price per share}}{\text{earnings per share}} \]
According to Graham (2017), if PER is < 15, the company’s performance is good.

Price to Book Value (PBV). This ratio compares the value of the stock market with the book value of equity (Subramanyam, 2014). The formula is:

\[ \text{PBV} = \frac{\text{equity market price per share}}{\text{book value of equity per share}} \]

According to Graham (2017), a good company performs well when PBV is < 1.5

Return on Equity (ROE). This ratio measures company’s ability to generate profit after tax using company’s own capital (Sudana, 2015). The formula is as follows:

\[ \text{ROE} = \frac{\text{net profit}}{\text{common equity}} \]

According to Graham (2017), if ROE is inclined toward stability or increases every year (assuming that average market capitalization > Rp175 billion), then the company’s performance is categorized as good.

Current Ratio (CR). This ratio shows the availability of current assets in meeting current liabilities (Subramanyam, 2014).

The formula is: \[ \text{CR} = \frac{\text{current assets}}{\text{current liabilities}} \]

According to Graham (2017), a company performs well when CR is > 2

Debt to Equity Ratio (DER). This ratio measures the percentage of funds granted by creditors to total equity (Subramanyam, 2014). The formula is as follows:

\[ \text{DER} = \frac{\text{Total debt}}{\text{Total equity}} \]

According to Graham (2017), if DER is < 1, the company performs well.

### 4. RESULT AND DISCUSSION

**Multiple Linear Regression Analysis Test**

Multiple Linear Regression Analysis is employed to test the effects of 6 financial ratios on stock prices of the companies in hospitality and tourism sub-sectors. Multiple Linear regression model is eligible since it meets the criteria of classical assumption test, namely normality test, multicollinearity test, autocorrelation test and heteroscedasticity test (Ghozali, 2011). The following is the table of analysis results upon implementing Multiple Linear Regression Analysis:

Table 2. Results of Multiple Linear Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>-2180.027</td>
<td></td>
<td>502.630</td>
<td></td>
<td>-4.337</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>LN_EPS</td>
<td>530.645</td>
<td></td>
<td>62.231</td>
<td>1.773</td>
<td>8.527</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>LN_PER</td>
<td>463.366</td>
<td></td>
<td>61.509</td>
<td>1.422</td>
<td>7.533</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>LN_PBV</td>
<td>225.498</td>
<td></td>
<td>72.614</td>
<td>.383</td>
<td>3.105</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>LN_ROE</td>
<td>-12.079</td>
<td></td>
<td>68.512</td>
<td>-0.020</td>
<td>-0.176</td>
<td>.861</td>
<td></td>
</tr>
<tr>
<td>LN_CR</td>
<td>-85.389</td>
<td></td>
<td>76.284</td>
<td>-0.088</td>
<td>-1.119</td>
<td>.270</td>
<td></td>
</tr>
<tr>
<td>DER</td>
<td>-298.575</td>
<td></td>
<td>122.351</td>
<td>-341</td>
<td>-2.440</td>
<td>.020</td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed Secondary Data (2018)

Table 2 shows that the Ln_EPS variable has sig. value of 0.000 that is lower than 0.05. Therefore, it can be concluded that the Ln_EPS variable partially has positive and significant effects on stock prices. It does not support the hypothesis stating that the EPS partially and significantly has effects on the stock prices. This means that an increase in EPS contributes to the increase in stock prices, and the decline in EPS contributes to the decrease in stock prices.

The Ln_PER variable in Table 2 shows that the sig. value of 0.000 is lower than 0.05. Therefore, it can be concluded that the Ln_PER variable partially has positive and significant effects on stock prices. It does not support the hypothesis stating that the PER partially and significantly has effects on stock prices. This means that higher PER increases price per share higher and lower PER decreases stock prices.

Table 2 shows that the Ln_PBV variable has a sig. value of 0.004 that is lower than 0.05. Therefore, it can be concluded that the Ln_PBV variable partially has positive and significant effects on stock prices. Thus, it does not support the hypothesis stating that PBV partially and significantly has effects on stock prices. This means that higher PBV increases stock prices and the lower PBV decreases stock prices.

The Ln_ROE variable in table 2 has a sig. value of 0.861 that is higher than 0.05. Therefore, it can be concluded that the Ln_ROE variable has no significant effect on the stock prices. Thus, it does not support the hypothesis stating that ROE partially and significantly has effects on stock prices. In other words, if there is an increase or a decrease in ROE, it does not affect stock prices.
Table 2 shows that the Ln_CR variable has a sig. value of 0.270 that is higher than 0.05. Therefore, it can be concluded that the Ln_CR variable has no significant effects on stock prices. Thus, it does not support the hypothesis stating that CR partially and significantly has effects on stock prices. Meaning to say, if there is an increase or a decrease in CR, it does not affect stock prices.

The DER variable in table 2 has a sig. value of 0.020 that is lower than 0.05. Therefore, it can be concluded that the DER variable partially has negative and significant effects on stock prices. This means that the lower the percentage of DER, the stronger the company's ability to repay the debt, which subsequently increases stock prices.

Based on the results of the analysis in table 2, it can be concluded that only 4 of 6 financial ratios that produce partial and significant effects on stock prices, i.e., EPS, PER, PBV and DER. Furthermore, these 4 ratios are employed to determine best performing shares in the companies in hospitality and tourism sub-sectors using Benjamin Graham's criteria.

### Performance Assessment of the Hospitality and Tourism Sub-sector using Benjamin Graham's Perspective

Table 3 shows that EPS, PER, PBV, ROE, CR and DER variables simultaneously produce sig. value of 0.000 that is lower than 0.05. Therefore, it can be concluded that the 6 independent variables simultaneously have significant effects on stock prices. Thus, it does not support the hypothesis stating that the EPS, PER, PBV, ROE, CR and DER simultaneously and significantly has effects on stock prices. This means that an increase in EPS, PER, PBV, ROE, CR and DER combined increase stock prices, and the decrease in EPS, PER, PBV, ROE, CR and DER combined decrease stock prices.
variables with significant effects on stock prices. These variables are EPS, PER and PBV. They partially produce positive effects on stock prices. Only DER produces negative effects on stock prices. Therefore, this research selects companies with good performance or having EPS ≥ 30%, PER < 15, PBV ≤ 1.5 and DER < 1. The following are the names of companies that meet these four criteria for 5 consecutive years:

Table 8. Recommended stocks that are worth buying

<table>
<thead>
<tr>
<th>No</th>
<th>EPS ≥ 30%</th>
<th>PER ≤ 15x</th>
<th>PBV ≤ 1.5</th>
<th>DER ≤ 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BAYU</td>
<td>PDES</td>
<td>ARTA</td>
<td>ARTA</td>
</tr>
<tr>
<td>2</td>
<td>JSPT</td>
<td>BAYU</td>
<td>INPP</td>
<td>JIHD</td>
</tr>
<tr>
<td>3</td>
<td>KPIG</td>
<td>JIHD</td>
<td>PDES</td>
<td>JIHD</td>
</tr>
<tr>
<td>4</td>
<td>PDES</td>
<td>JSPT</td>
<td>SHID</td>
<td>KPIG</td>
</tr>
<tr>
<td>5</td>
<td>SHID</td>
<td>KPIG</td>
<td>SHID</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>SHID</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8 shows the recommended stocks for purchasing with Benjamin Graham’s criteria. Although for 5 consecutive years no company meets all four criteria, but there are seven companies that meets 2 of 4 specified criteria, namely ARTA (PT Artavest Tbk), BAYU (PT Bayu Buana Travel Service), JIHD (PT Jakarta Internasional Hotels and Development Tbk), JSPT (PT Setiabudi Internasional Tbk), KPIG (PT MNC Land Tbk), PDES (PT Destinasi Tirta Nusantara Tbk), and SHID (PT Hotel Sahid Jaya Internasional Tbk).

5. CONCLUSION

Variables of Earning Per Share (EPS), Price to Earnings Ratio (PER), Price to Book Value (PBV), Return on Equity (ROE), Current Ratio (CR), and Debt to Equity Ratio (DER) simultaneously affect stock prices of the companies in hospitality and tourism subsectors on Indonesia Stock Exchange.

Variables of Return on Equity (ROE) and Current Ratio (CR) produce no significant effects on stock prices of the companies in hospitality and tourism sub sectors on Indonesia Stock Exchange. This means that...
the two variables cannot be used as the basis of consideration in purchasing shares.

EPS, PER, PBV variables partially produce positive and significant effects on stock prices, while DER variable produces negative and significant effects on stock prices. This means that these four variables are illegible to be used as the basis of consideration in purchasing shares.

6. RECOMENDATION

Companies should maintain well-established financial ratios, e.g., DER remains < 1, and EPS > 30%, PER < 15 and PBV < 1.5. Investors or potential investors in making decision in regards with buying or selling shares should take into consideration other factors that affect fluctuations in stock prices, such as internal political situation of a country, and external conditions, such as China-US trade war.

Researchers focusing on similar topic should increase the number of samples and prolong the observation period in the attempt to get better results.

7. REFERENCES


https://id.tradingeconomics.com/united-states/gdp-growth. 2018


