1. **INTRODUCTION AND OBJECTIVE**

This article attempts to discuss two selected past transactions that I have gathered from public domain and public announcements, to illustrate the manner of pricing methods being used in some power plant operating companies, purely from educational perspective.

For purpose of illustration, this article shall present the following transactions as an illustration on how the selected companies below had priced the share of the relevant companies, of which the main operating income are from operation of independent power plants.

(i) The listing of Malakoff Corporation Berhad (Malakoff). The information used in the analysis below could be obtained from the prospectus issued by Malakoff dated 17 April 2015 - **CASE STUDY 1**

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<tr>
<th>Question</th>
<th>Response</th>
<th>Explanation</th>
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<tr>
<td>1. What are the key essential steps undertaken by Malakoff in relation to its paid up capital to prepare Malakoff to be listed.</td>
<td>Malakoff has essentially undertaken <strong>two</strong> (2) key steps as follows:-  &lt;br&gt; (i) Subdividing the existing number of shares in Malakoff, which is before the listing, made up of par value of RM1 per share to prior to listing, of RM0.10 par value per share? <strong>This has the effect of multiplying the number of shares to 10 times.</strong> Hence, it has the effect of increasing the number of shares from 400 million to 4,000 million shares. &lt;br&gt; (ii) Thereon, a public issue of 1,000 million shares is offered to institutional and retail investors based on a ratio of</td>
<td>Essentially, these steps are needed for the setting the price per share at a price which is affordable for investors to participate, and has no major consequence in terms of valuation.</td>
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### 2. From perspective of Relative Valuation Analysis, what is the multiple offered from price over book ratio?

<table>
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<th>(i)</th>
<th>Price over Book</th>
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<td>The proforma net asset per share was <strong>RM1.17</strong> per share. In comparison with the price offered at <strong>RM1.80</strong> per share, this translates to a multiple of <strong>1.5 times</strong>. (Section 4.5.1 Page 36)</td>
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**Workings:**

**Note 1**

Proforma net assets as at 31 December 2014 were approximately RM5,829 million. The number of Malakoff’s par value of RM0.10 shares was RM5,000 million.

**Commentary:**

The basis of arriving at **RM1.80** per share was discussed in Section 4.5. See pages 35, 36 and 37.

The offered price of **RM1.80** per share which translate to 1.5 times price over book multiple, does consider the future earnings potential of Malakoff.

From Section 4.5.4 Page 37, it is noted that the **market capitalization is approximately RM 9 billion**. This is understandable as the total number of issued listed shares is 5 billion and each share is priced at 1.80 per share. Hence, total market capitalization = 5 b shares x 1.8 /share= RM9b.

For purpose of academic discussion, if information such as the projected cash flows from each of the operating plant is available, an analyst can use Discounted Cash Flow technique to evaluate the market capitalization of Malakoff using DCF based on the methods discussed in preceding topics from Issue 1 to Issue 7. This method could not be illustrated here as such information is not available in public domain.

### 3. Why do some companies price to book value is less and some are more than 1?

Price to book ratio is a comparison between the market price and the book price. Logically, if book price ( as recorded based on accounting conventions ) are based on fair value, then price to book ratio should be close to One, in an efficient market. But, we also know that accounting conventions are not truly based on fair value, but a mixture of historical cost and also fair value accounting. Further, book value **DOES NOT** take into consideration future growth opportunities of a company. Hence, price over book value could be different from one. i.e. it could be lesser than one or more than one based on investors expectation of
the growth opportunities of a company, as measured using Return of Equity (ROE), as compared with the investors required rate of return (Cost of equity) of a company under evaluation.

For illustration, a computation was made on the historical ROE% for the past three years prior to listing. Excluding FY2013, (for reasons stated under point 4, Case 1 below), the average ROE% was approximately, 9.8%. Academically, this would imply that the cost of equity demanded by the investors are lesser than 9.8%, and hence explains for the market pricing of 1.5 times above its book value.

<table>
<thead>
<tr>
<th>Profit attributable to equity owners</th>
<th>RM000</th>
<th>ROE,%</th>
<th>Net Assets, RM000</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2012</td>
<td>467,852</td>
<td>11.3%</td>
<td>4,127,736</td>
</tr>
<tr>
<td>FY2013</td>
<td>161,533</td>
<td>3.9%</td>
<td>4,139,146</td>
</tr>
<tr>
<td>FY2014</td>
<td>341,549</td>
<td>8.2%</td>
<td>4,176,616</td>
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4. From perspective of Relative Valuation Analysis, what is the multiple offered from price over earnings?

In the prospectus, no mention was made on the price multiples using price over historical earnings. The author concurs that price over historical earnings multiple is not suitable basis as the earnings are affected by the different phases that an independent power plant during the duration of the operation, for following reasons:-

**Commencement of operation right after construction phase**

For an independent power plant that has just commenced operation, it would have to service the debt interest cost in the early years and hence earnings are low during this period.

**Completion of repayment of debt financing phase**

Thereafter, upon complete repayment/redemption of the loan, there are no longer any interest charges and earnings would be higher relative to the initial years.

**End of life phase**

However, once the independent power plant has reached its end of life, the earnings will be minimal and most likely incur losses.

Hence, measurement using price earning multiple would not be suitable due to the volatile earnings reported during the different stages of independent power plants. For purpose of academic discussion, the author has computed the historical/trailing PE multiples based on the proforma consolidated results of Malakoff, three years prior to the listing. It is noted that the PE multiples ranges from 19 times to 56 times.

The author also wishes to point out that the variation in PE multiples,
typically a significant increase in the PE multiple to 56 times in FY2013, apart from arising due to volatility in earnings due to different stages of life of an independent power plant is also caused by an operational matter that was identified upon analysing the prospectus as explained under commentary below. Meaning, that if the operational problems as highlighted in Tanjung Bin Power Plant in FY2013 did not occur, the variation of PE multiples, due to volatile earnings from different phases of life of an independent power plant could be of narrower gap, than as reported based on proforma actual results.

Table below details the computation of the historical PE multiple as analysed from the public information gathered from the prospectus.

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<th>Profit attributable to equity owners RM000</th>
<th>Based on offer price of RM1.80 per share PE multiple, times</th>
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<tbody>
<tr>
<td>FY2012</td>
<td>467,852</td>
<td>19</td>
</tr>
<tr>
<td>FY2013</td>
<td>161,533</td>
<td>56</td>
</tr>
<tr>
<td>FY2014</td>
<td>341,549</td>
<td>26</td>
</tr>
</tbody>
</table>

Commentary:
It is noted that the reported earnings for FY2013 was significantly lower in FY2013 for the period under evaluation from FY2012 to FY2014. A possible explanation could be found on Page 356 of Section 12.2.2.(ii)(a) of the prospectus, that essentially attributed the lower reported earnings to two reasons stated below related to Tanjung Bin Power Plant, coal fired power plant with capacity of 2,100 MW.

(i) The plant experienced an unscheduled outage in first quarter of 2013 that resulted in capacity payments reduced by approximately RM168 million in FY2013 as compared with FY2012. Based on the annual capacity payment for FY2012 of approximately RM944 million, this shall translate to an average monthly capacity payment of RM79 million. The reduction in revenue in FY2013, of RM168 million is equivalent to about 2 months lost in revenue.

(ii) A remedial work commencing in June 2013 has rectified the plant and resulted in a write off of approximately RM109 million in FY2013.

END OF CASE 1
Disposal by Genting Berhad and its indirect wholly-owned subsidiary, Genting Power (M) Limited, of their entire 97.7% shareholding interests in Mastika Lagenda Sdn Bhd to 1Malaysia Development Berhad for a total cash consideration of approximately RM2.3 billion. Mastika Lagenda holds 75% equity interest in Genting Sanyen Sdn Bhd, which owns and operates the 720MW gas-fired Kuala Langat Power Plant in Malaysia, and has a 100% equity interest in Mastika Utilities & Services Sdn Bhd, which treats and supplies raw water to the plant.

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<tr>
<td>1. What is the background of this case?</td>
<td>Essentially, Genting Berhad and its indirect wholly owned subsidiary, Genting Power (M) Limited, has disposed of an approximately 97.7% of equity interest in Mastika Legenda Sdn Bhd, that owns a 75% equity interest in Genting Sanyen, that operates a gas fired power plant with a size of 720MW. The sales consideration was for cash of approximately RM2.3 billion.</td>
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<td>2. From perspective of Relative Valuation Analysis, what is the multiple offered from price over book ratio?</td>
<td>From the announcement made to Bursa and from the annual report of Genting Berhad for FY2012, Genting Berhad reported a profit of approximately RM1.9 billion from the disposal (Section 9.2 of the 13 August 2012’s announcement and annual report for FY2012). Based on rationalization, since the Genting Group reported a profit of RM1.9 billion, the net assets at date of disposal was approximately RM0.4 billion (an approximate of the historical cost for the power plant, for ease of illustration). This shall translate to a price over book value of approximately 5.8 times ((2.3/0.4 = 5.8x)). The transacted PB multiple was relatively high (the value ascribed to the Kuala Langat, Power Plant) compared to case 1 above. However, due to limited public information available, no further comments could be made and it is merely an academic discussion unless a discounted cash flow analysis could be performed to determine the fair price.</td>
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A point to add here, purely based on my opinion is that from the accounting conventions, a purchaser (i.e. 1-MDB) would likely use a discounted cash technique to determine the fairness of the purchase price for purpose of complying with the accounting standards when recording the business acquisition, in accordance to the Purchase Price Allocation (PPA) exercise and to test for impairment for goodwill, which is a common practise in the industry.
3. From perspective of **Relative Valuation Analysis**, what is the multiple offered from price over earnings?

From the Bursa Announcement dated 13 August 2012, page 5, it was disclosed that the 720MW gas-fired combined cycle power plant (“Plant”) **commenced commercial operations in 1995** and supplies electricity to Tenaga Nasional Berhad under a 21-year power purchase agreement expiring in February 2016 (“PPA”). Hence this means that as from 2012, the **power plant is approximately 4 years to expiry of the PPA**. It is likely that the power plant is in the post-repayment of the loan period and shall therefore report higher earnings than during its earlier years. This is evident from the estimated PE multiple based on FY2011’s results, is approximately 10 times. (\( \frac{2,300}{231.3} = 10 \)). However as explained under point 4, Case 1 above, measurement using price earning multiple **would not be suitable** due to the volatile earnings reported during the different stages of independent power plants and it does not take into consideration other specific factors of valuing independent power plants such as remaining useful life amongst others.

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**END OF CASE 2**
LEARNING POINTS:

1. For valuation of power plants, the primary technique if information is available is the discounted cash flow. However, for analysis of public companies, this type of analysis is difficult to be implemented due to non-availability of disclosed information on the specific independent power plants owned by the company under evaluation.

2. Relative valuation analysis could be used to supplement the analysis but this has to be accompanied by a thorough study on other available public information to assist an analyst to arrive at more meaningful conclusion. This article did not dwell into such other techniques.

3. This article also discusses, Price to Earnings ratio is not a suitable technique as a standalone ratio for valuing an independent power plant, as this ratio is affected by the different phases of the power plant under evaluation as highlighted under Case 1, point 4 above.

4. Price to book value represents the excess / (shortfall) of market price to book value and the reasons of such excess / (shortfall) allow an analyst to conduct more analysis work to determine the fairness of the excess / (shortfall).

5. This article also intends to highlight that justified Price over Book Multiple (i.e. the “fair” price over book multiple) is related to the future growth opportunity of a company under evaluation and could be measured by comparing the future steady state ROE% and the required return by investors (Cost of equity). - Case 1, point 3.

6. That any excess of price to book value shall translate to goodwill in the books of an acquirer in a business combination and requires the acquirer to conduct a Purchase Price Allocation to determine the fair value of assets and liabilities including testing for any potential impairment of goodwill. - Case 2, point 2
THANKS FOR READING.

This article is prepared by Ong Tee Chin, CFA, FRM, and represents the view of the author. He can be contacted at ong@atlantiscapital.org for any further enquiries on the contents of this article.

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