The Reluctance of Capitalizing the Borrowing Costs
A Recent Study of Residence Development in the Province of Jawa Barat

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Abstract
The emerging trend of emerging business occurs due to the consciousness of society regarding to the long-term investment. Many property developers are currently being aware of creating new spaces for society, as well as preparing their company to face new era of the pricing competition of property. This research focuses on the decision of property developers in pricing decision in the scope of construction cost reporting in which the bank loan would likely affect the financial leverage, project acceleration, and selling price which result in volume of profit. Based on the applicable accounting standards (PSAK no.26), companies are to capitalize all borrowing costs to the construction costs at the same time. Using quantitative method, this research attempts to find relationship between construction cost and borrowing cost towards stock market performance. In this study, EPS is assumed to be a parameter for stock performance measurement. The study suggests that construction costs does not impact on the stock performance in the market. On the other hand, borrowing costs give significant impact to EPS. This research also finds that in any level of rate, interest would be influencing the EPS.

Abstrak

Keywords: Interest Capitalization, Construction Costs, Borrowing Costs, Earnings per Share.
1. Introduction

The emerging issue of metropolitan (especially: capital city) density has become the reason of property developers to open new spaces for residential purpose. In Indonesia, based on the data obtained from Dinas Kependudukan dan Catatan Sipil Provinsi DKI Jakarta, DKI Jakarta has the range of density from 13,377 to 18,569 citizens/km². This figure triggers property industry to offer a new perspective of being a millennial suburban (someone who works in the business district and live at the side of town). Constructions have spread all over the west java region whereas, more than 20 apartments and 40 residential clusters have been built which are varied in terms of price.

To accelerate the construction project, many developers lean on long-term bank loan as the financial leverage as many banks are ensured regarding to the collateral aspect of credit possessed by property companies. Another reason is that the interest revenue produced from this type of agreement shall boost up the bank liquidity and capital adequacy ratio (CAR). On the other hand, interest expense accrued by developers cannot be used as a component that reduces tax due to the special accounting treatment for this type of borrowing cost. Furthermore, Pernyataan Standar Akuntansi Keuangan (PSAK) – (Statement of Financial Accounting Standard) No.26 commands that this type of borrowing cost must be included on the construction cost in which, many companies reacts differently towards this policy due to margin that may affect their financial performance in the stock market.

This research focuses on the tendency of property companies to exclude the borrowing costs for the purpose of stock performance. As the basic accounting principle explain clearly that high cost could impact on an enterprise’s profitability which ends to public perception in investment decision, it can be assumed that there is a positive relationship between both construction cost and borrowing cost to the Earnings per Share (EPS) which are to be proven statistically. At the end of the result, this research also provides the analysis of bank loan interest rate’s impact to companies’ EPS.

2. Literature Review

2.1 The Nature of Interest Capitalization Based on PSAK 26
According to many researches, an enterprises’ earnings management activity is categorized as normal behavior. Murhadi (2009) admits that earnings management practice is one of the methods in attracting investors to the extent that financial reporting’s reliability is not set aside. Many enterprises have done this through discretion of board of directors (Murhadi, 2009). This policy is also called “beneficiary earnings management” meaning that earnings management is used only to inform stakeholders regarding to information which is not stated in financial reporting (Subramanyam, 1996). One of the advantages of beneficiary earnings management is the availability of abundant information regarding to corporate governance structure and policy control which are not available in enterprises with absence of earnings management practices (Arya, Glover, & Sunder, 2003).

Bridging this circumstances, the accounting standards all over the world nowadays open up the possibility for companies to engage in beneficiary earnings management for which the world of accounting regulation has learnt so much from the domino effect of financial crash in 1990s (Kranacher, 2006). One of schemes engaged by many public companies at that moment was improper accounting treatment for particular account i.e. expenses. Considering huge fraud cases from Enron, World Com, and Adelphia Communication (Beasley, Carcello, & Hermanson, 1999), including small enterprises’ scandal i.e. Livent (Widhoyoko, 2017) in which these companies have implemented fraudulent capitalization schemes. To response, accounting standards nowadays seem to degrade its stringency regarding to capitalization. The main purpose of this policy is to relieve auditors in terms of fraud risk consideration based on Statement of Auditing Standards (SAS) No.99 (American Institute of Certified Public Accountants, 2002).

The amended policy embrace both International Financial Reporting Standards (IFRS) and General Accepted Accounting Principles (GAAP). In the light of interest capitalization, the only difference between International Accounting Standards (IAS) No.23 and Statement of Financial Accounting Standards (SFAS) No.34 is that SFAS no.34 does not compromise in the consideration of long-term inventory as the “qualifying assets”(Soo, 1999) whereas, IAS 23 accepts it(Adriana, Szilveszter, & Ioana-Maria, 2011). Qualifying asset is a long-term asset sold or used for company operation.
whereas, companies must consider interest capitalization to be included to total construction cost (Bowen, Noreen, & Lacey, 1981; Corgel, 2014; Warner & Whitehurst, 1988).

Facing this global trends, Ikatan Akuntan Indonesia (IAI) (Indonesian Association of Accountants) issued PSAK no.26 as the accounting standard for capitalization of interest cost to the construction cost. The modification done in PSAK No.26 compared to IAS no.23 and SFAS No.34 is that in Indonesia, borrowing costs capitalization can be done in a certain proportion of loan towards the total construction cost. For example, when a property developer proposes a loan to the bank, the bank usually lend in consideration of bad-debt risk. Therefore, only a certain percent of construction cost will be provided by the bank.

Unlike other countries, Indonesian property developers tend to have multiple debt-financing from different bank which provides different interest rate. In the risk management perspective, this can also be called as portfolio management (Liapis & Galanos, 2010) due to the policy of financial institution (e.g. bank) which would finance the project to the extent that the project could satisfy the collateral requirements of loan (Corgel, 2014). In other words, it is very rare to find a construction project in Indonesia to be totally financed by the bank.

### 2.2 The Use of EPS as Financial Performance Measurement Tool

According to Weaver (2012), in assessing of financial performance, financial accounting reports are the main document which contains all necessary information. Financial statements depict the whole circumstances of the company in many perspectives. In the context of financial performance, statement of comprehensive income provides well-structured data regarding to an enterprise’s ability to maximize the resources in generating profit (Weaver, 2012). However, the true representation of financial performance can change when it comes to external stakeholders’ view (e.g. stock brokers, governments, investors, and creditors) (Kranacher, 2006).

However, this problem can be accommodated through the calculation of EPS which is the portrait financial performance and component of stock price valuation. Furthermore, EPS is known as one of the profitability ratios (Weaver, 2012; Weygandt, Kimmel, & Kieso, 2012) for

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which, its figure depicts the performance of the company’s operational based on the profit volume taking an effect to common share price. The only critics for the use of EPS is its exception to remove the component of preferred stock. Preferred stock is known as the external component articulating the amount of institutional investors (i.e. financial institutions, banks, and other types of enterprises) (Kallberg, Liu, & Villupuram, 2013; Swammy, 2017).

EPS is argued to be a measurement tool for stock performance even though there are external aspects (i.e. supply and demand, interest rate, and other non-financial aspects) that influences stock prices’ fluctuation (Barefield & Comiskey, 1975; Patell, 1976). However, recent studies from different continents show that EPS can be a dominant factor of share price measurement (Enow & Brijlal, 2016), and a component which affects positively to equity valuation in stock market trading (Bhatt & Jk, 2012).

3. Hypothesis

There are at least two problem statement in this research:

- Is there any impact of construction cost towards EPS?
- Is there any impact of borrowing cost towards EPS?

Based on the problem statements, there are two hypotheses which are to be proven:

H1: There is no significant impact of construction cost to the value of EPS.
H2: There is a positive and significant impact for borrowing cost as the representation of capitalized bank loan interest expenses to construction cost towards EPS.

4. Research Materials and Method

Based on the variables tested, this research has gathered three types of financial data from 30 random projects of apartments and housing residences taken from “Dinas Perumahan Dan Permukiman Provinsi Jawa Barat”. These three types of data are:

- Construction cost
  (This data represents initial budgeting activity for property developers to start a new project. This figure was the part of debt-financing proposal submitted to the
bank and authorized by the bank for long-term debt financing. This figure does not represent full cost of construction.

- **Borrowing cost**
  (This data represents the amount of bank notes’ interest expenses which are capitalized into the construction costs. The percentage of each are varied one each other.)

- **Earnings per Share (EPS)**
  (This data represents a proportion of net income that affects the share price fluctuation. EPS excludes the element of preferred stock.)

This research uses quantitative method to find relationship between the construction cost, borrowing cost, and EPS) involving various steps of statistical analysis e.g. confidence interval analysis, linear regression test, and Oneway of Anova. The data analysis started with the validation of EPS as the parameter for financial performances, continued with proof of hypotheses using multi regression analysis, and ended with analysis of interest rate influencing EPS.

5. **Results and Discussions**

To begin the analysis, confidence interval technique is useful for to test the accuracy of Mean (µ) as a sample representation of the real population. Confidence interval is the range between two figures whereas µ of the sample used is located between those figures. Prior the interrelation analysis between variables, the researcher categorizes EPS into three groups of interval which are (1) less profitable, (2) profitable, and (3) highly profitable.

Table 1.
Descriptive Statistic using Confidence Interval

<table>
<thead>
<tr>
<th>Describives</th>
<th>Statistic</th>
<th>Std Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>EarnShare Mean</td>
<td>314.2030</td>
<td>67.64212</td>
</tr>
<tr>
<td>95% Confidence Internal for Mean Lower Bound</td>
<td>175.8593</td>
<td>452.5467</td>
</tr>
<tr>
<td>95% Trimmed Mean</td>
<td>277.7315</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>190.8600</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>137263.780</td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>370.49116</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>1325.56</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>1325.56</td>
<td></td>
</tr>
<tr>
<td>Interquartile Range</td>
<td>403.63</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>1.443</td>
<td>4.27</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>1.392</td>
<td>.833</td>
</tr>
</tbody>
</table>

According to the analysis, the trend EPS represented by confidence interval (µ) for 30 different construction project is resulted between 175.8593 for lower bound and 452.5467 for upper bound as the whole interval classes are presented below. From the data below, it is concluded that EPS resulted from the construction projects as the representation of financial performance measurement has a tendency to show that the property developers have met a certain target.
profit significantly at $\alpha<0.05$. In other words, the use of EPS is validated.

**Table 2.**
Trends of EPS Divided into Classes

<table>
<thead>
<tr>
<th>Interval Classes</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.17 – 441.7</td>
<td>Less Profitable</td>
</tr>
<tr>
<td>441.8 – 883.7</td>
<td>Profitable</td>
</tr>
<tr>
<td>883.8 – 1325.7</td>
<td>Highly Profitable</td>
</tr>
</tbody>
</table>

Furthermore, this research uses regression linear test to prove the hypotheses. The tables below show three information related to the standard of error, and the value of significance.

**Table 3.**
The Statistical Proof for Hypothesis 1

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>496954.027</td>
<td>1</td>
<td>496954.027</td>
<td>3.658</td>
<td>0.06</td>
</tr>
<tr>
<td>Residual</td>
<td>3980647.382</td>
<td>29</td>
<td>132739.045</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3980647.382</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the analysis, there is no positive and significant impact of construction cost towards EPS. The figure shows the amount “F” for 3.658 with the value of significance at below 0.05 ($\alpha>0.05$).

**Table 4.**
The Statistical Proof for Hypothesis 2

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td>3.681</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>BorrowCost</td>
<td></td>
<td>-1.944</td>
<td>0.037</td>
</tr>
</tbody>
</table>

According to the analysis, it shows that there is a positive and significant impact of borrowing cost as the representation of capitalized interest cost towards EPS. The figure shows the amount “F” for 4.815 with the value of significance at 0.037 ($\alpha<0.05$). Therefore, hypothesis 2 is proven and accepted.

This research has proven that when the company exercise its policy based on PSAK No.26 (interest capitalization), the impact is to the increasing amount of EPS. This phenomenon might be explained using accounting theory regarding to the income statement analysis. Using the statement of income, the company operational performance (financial aspect) can be measured in several steps which are the...
calculation of gross profit, earnings before interest and tax (EBIT), and net profit (Godfrey, Hodgson, Tarca, Hamilton, & Holmes, 2010). Furthermore, there are two parts of cost anatomies in this report: (1) operational expense and (2) regulatory expense whereas the regulatory expenses recognized once an enterprise dealing with external stakeholders such as banks and government (Mills, 1996; Yang & Tan, 2012).

In the light of interest capitalization practices, one of the regulatory expense elements (interest) is capitalized to the value of assets in the balance sheet which are to be either depreciated in contemporaneous with property, plant, and equipment or amortized separately from fixed assets (Wells, 2011). This technique was used wrongfully by US top public companies in the era of (1987-1997) by capitalizing not only regulatory but also operational expenses to fixed assets (Beasley, Carcello, & Hermanson, 1999). However, this leniency would empirically support the EPS and stock performance due to the minimization of expenses through accrual basis of accounting that allows expenses recognized in several periods (Khrawish, Siam, & Jaradat, 2010).

In the light of the development of property development, this result may imply on the managers’ confidence level since it is empirically tested that the cost of debt does not bring out any financial distress issues due to abundance of cost of debt (Ratner, Stein, & Weinauer, 2009). The pricing decision can be charged indirectly to the property buyer in an installment agreement which consists of two broad processes: (1) property developers use initial payment to fulfil banks’ collateral requirements, and (2) with any respect of economic analysis, the installment cost must include the actual payment proportion and inflation risk for both developers and creditors.

Finally, there must be another test for the implication of interest rate to EPS due to various banks have decided to provide interest loan for construction projects quite variably. The first step is to categorize the interest rate from the lowest to the highest.
Table 5.
Category of Interest Rate and Its Tests

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-9%</td>
<td>6</td>
<td>376.459</td>
<td>447.76595</td>
<td>162.69795</td>
<td>-91.5159</td>
<td>849.3282</td>
<td>.00</td>
<td>793.33</td>
<td>1003.63</td>
</tr>
<tr>
<td>9.1-12%</td>
<td>20</td>
<td>321.069</td>
<td>376.51874</td>
<td>84.91215</td>
<td>114.8523</td>
<td>497.2047</td>
<td>.00</td>
<td>132.56</td>
<td>132.56</td>
</tr>
<tr>
<td>12.1-13%</td>
<td>4</td>
<td>183.576</td>
<td>252.05446</td>
<td>126.02573</td>
<td>-217.5601</td>
<td>584.6101</td>
<td>.00</td>
<td>534.17</td>
<td>534.17</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>314.263</td>
<td>370.48115</td>
<td>67.64212</td>
<td>175.8593</td>
<td>452.8467</td>
<td>.00</td>
<td>132.56</td>
<td>132.56</td>
</tr>
</tbody>
</table>

According to the data analysis, there are no significant differences between classes of interest rate categorization in its implication to EPS which is depicted through the value of “F” for 0.326. This insignificance is shown at 0.724 (α>0.05). In other words, no matter the size of interest rate, the EPS would likely get affected. Several investigations support this result. One of them is investigation on Xerox Inc. shows that interest rate allows the company to earn more revenues and gains (Butala & Zafar U. Khan, 2010). Others macroeconomics findings support this result i.e. inflated gross profit of real-estate industry in Greece (Liapis & Galanos, 2010), and increasing market valuation due to interest rate in Turkey from 1998 to 2012 (Toraman & Başarir, 2014) and Indonesia from 2009 to 2012 (Magdalena & Dananjaya, 2015).

6. Conclusion

This research proves that there is significant and positive relationship between the interest capitalization (showed in the variable of borrowing cost) and increasing amount of EPS no matter how high or low the interest rate is. EPS as one of the profitable and financial market ratio is validated to be a financial performance parameter. However, the variable of construction cost has no implication to EPS. This means that capitalization interest can be an element to raise the EPS. Hence, this research recommends the companies to use the debt-financing provided by banks in which, in any level of interest rate, PSAK no.26 allows...
property developers to capitalize bank loan’s interest which potentially increase the EPS as one of the parameters of market valuation.

7. **Research Limitation and Implication**

This research relies solely on the data provided by governmental agency with the restriction in publishing the actual data from actual property developers. The data used might be slightly different compared to actual expenditures due to corporate nature in financial disclosure which vary between taxation, compliance, and corporate purposes. However, holding on to the *bonafide* assumption regarding to the corporate disclosure, without including any professional skepticism to particular governmental agencies; it is permissible to conclude that the data is adequately representative towards the current trends. All topics and discussions related to pro and cons regarding to accountability and reliability either corporate and governmental disclosure are not the scope of this research.

**References**


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