THE EFFECT OF LEVERAGE AND CASH HOLDING ON PROFIT GROWTH USING TAX PLANNING AS MODERATING VARIABLE FOR PROPERTY AND REAL ESTATE COMPANIES LISTED ON THE INDONESIAN STOCK EXCHANGE

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ABSTRACT

The underlying assumptions of this research are summarized in the following problems formulation: (1) Does leverage affect profit growth? (2) Does cash holding affect profit growth? (3) Does tax planning affect profit growth? (4) Can tax planning moderate the relationship between leverage and profit growth? (5) Can tax planning moderate the relationship between cash holding and profit growth? The aim was to determine the effect of leverage, cash holding, and tax planning on profit growth and the use of tax planning as the moderating variable for the effects of leverage and cash holding on profit growth. The samples were selected using the purposive sampling method on Property and Real Estate companies on the IDX between 2014 – 2018. The results showed leverage did not significantly affect profit growth while cash holding and tax planning had a significant effect. Moreover, tax planning was observed not to have the ability to moderate the relationship between leverage and cash holding with profit growth.

INTRODUCTION

A company is usually, as a general rule, set up to amplify profits. This profit expands capital or net resources starting from the side exchanges owned by a business substance over a period. It is important to note that high profits influence the investment decisions made by financial backers. According to Setiawati (2018), the current financial developments significantly affect the existence of residents in a country and the assistance provided to the government by individuals. This means one of the ways to develop the Indonesian economy further is through contributions. Meanwhile, the benefits development guide used in this research refers to the income before expenses except for special items and discounted tasks.

Several strategies, especially those related to financial conditions, have been implemented by Indonesian public authorities since the financial crisis of 1998. Still, they do not seem to have yielded great results for business progress as indicated by different companies, including those listed on stock trading and those protected in 2008. Moreover, a company needs assets such as bank credit, bonds, and even capital, more precisely by selling the protection as common or preferred stock, to finance its operating costs. However, it is essential to note that not all of these assets the companies are interested in exploring due to the meager public assistance for the advancement of the capital market in Indonesia. Therefore, financing sources such as bank loans are usually utilized due to the cheaper cost of...
liquidation in Indonesia when compared to abroad. Bank credits are also limited by some challenges, such as those related to fixed expenses as income. The size of the income depends on the size of the asset source used, thereby making the organization pay costs as a major aspect apart from the income. This means an organization needs to generate sufficient benefits such as the payments from using obligations considered more than interest costs to fulfill this commitment.

Furthermore, several measures or standards need to be considered by organizations in utilizing subsidized sources of bank credit, such as the degree of employment influence, degree of monetary influence, profit from speculation, return on value, net income, and financial profit. It is also important to note that the size of the liability is directly related to the profit, and the return on value is a major concern in the utilization of liabilities even though the profit from speculation is fixed. The return on value and profits from businesses are also part of the dangers of using liabilities. (Prajonto, 2013)

Leverage is defined as an arrangement associated with financing organizations committing their liabilities towards paying interest and principal (Prasetyorini, 2013). This concept was proxied in this study using the Debt Equity Ratio (DER), which assesses liabilities by value. This is in line with the findings of Handayani (2016) that DER has a negative effect on the development of benefits. Moreover, there is a need for adequate planning of the money or abundance of cash in an organization (Christina & Ekawati, 2014).

According to Nofryanti (2014), companies are motivated to hold cash to pay liabilities, finance the opening of profitable speculations, and serve as reinforcement in case of unexpected subsidies. This means cash holding rate guarantee is one of the essential monetary choices required by a financial supervisor. When a company gets cash inflow, a decision is made to give investors profits or save for the future (Marfuah & Zulhilmi, 2015). Meanwhile, several monetary emergencies were observed to have significant influence up to 2012, such as those due to negligence in maintaining liquidity recorded in America in 2008 to have a global impact and changed the way large organizations view the importance of maintaining a company’s liquidity level. This led them to become more moderate, and they also tried to limit the dangers of liquidity by following the company’s liquidity level (Nofryanti, 2014).

Tax is a significant source of income usually used by a country to finance state consumption and routine and progress purposes. Meanwhile, it is an expense that reduces companies’ net profit (Suandy, 2011), thereby becoming a burden. This usually makes a company’s management implement several strategies such as tax planning to reduce tax rates. This involves smoothing out the installments of costs identified using tax savings, mainly when the government assists company representatives.

This present research focuses on companies listed in the Property and Real Estate sector of the Indonesia Stock Exchange (IDX) due to the increase in the prices of properties in the country. This annual price increment provides profit opportunities for investors investing their funds in the property business. Still, the stock prices in the sector tend to fluctuate, as indicated in the following figure.
The annual profit growth for the property sector in 2014-2018 presented in Table 1 showed several profits and losses in some years.

Table 1: Property & Real Estate Companies Profit data for the year 2014-2018

<table>
<thead>
<tr>
<th>No</th>
<th>Company Name</th>
<th>2014 (Rp)</th>
<th>2015 (Rp)</th>
<th>2016 (Rp)</th>
<th>2017 (Rp)</th>
<th>2018 (Rp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT.APLN</td>
<td>938,875,368</td>
<td>1,118,073,171</td>
<td>961,076,999</td>
<td>1,871,892,833</td>
<td>248,210,474</td>
</tr>
<tr>
<td>2</td>
<td>PT.ASRI</td>
<td>117,695,523</td>
<td>686,484,951</td>
<td>520,649,362</td>
<td>1,377,949,750</td>
<td>978,665,528</td>
</tr>
<tr>
<td>3</td>
<td>PT.ELTY</td>
<td>424,757,565</td>
<td>(931,612,045)</td>
<td>(472,817,019)</td>
<td>(253,258,802)</td>
<td>2,480,648,273</td>
</tr>
<tr>
<td>4</td>
<td>PT.CTRA</td>
<td>1,788,787,683</td>
<td>1,753,690,105</td>
<td>1,143,006</td>
<td>966,452</td>
<td>1,326,395</td>
</tr>
<tr>
<td>5</td>
<td>PT.LPKR</td>
<td>2,988,621,424</td>
<td>16,914,134</td>
<td>616,915</td>
<td>1,636,156</td>
<td>(1,053,510,000)</td>
</tr>
<tr>
<td>6</td>
<td>PT.BKSL</td>
<td>38,517,193,109</td>
<td>6,693,716,420</td>
<td>562,230,562,000</td>
<td>466,871,374,097</td>
<td>376,063,389,204</td>
</tr>
<tr>
<td>7</td>
<td>PT.SMRA</td>
<td>1,617,479,556</td>
<td>1,064,079,939</td>
<td>605,050,858</td>
<td>605,050,858</td>
<td>690,623,630</td>
</tr>
</tbody>
</table>


It was discovered that PT PLN, PT SRI, PT BKSL, and PT SMRA had both an increase and decrease in profit annually, but PT ELTY recorded a loss in 2015-2017 and a substantial profit increase in 2018. Moreover, PT CTR recorded a decline in profit annually while PT LPKR had a profit reduction and even a loss in 2017. The company’s standard benefits between 2014 and 2018 were 283,453,191,660, with the highest profit growth of 2,480,648,273 recorded at PT ELTY in 2018.

Therefore, this research was conducted to determine the effect of leverage and cash holding on profit growth using tax planning as the moderating variable. The manufacturing companies in the Property and Real Estate sector were used as samples due to their potentials associated with more developments in the housing, apartment, shopping centers, and office buildings which attract financial backers to invest their assets for future success.

The data obtained from Kompas.com on the property sector of Jakarta showed the importance of the sector in increasing public finances and its potential to be a benchmark for the current financial developments. However, the sector needs to be prepared for the next financial year because it has experienced a constant pattern of shortages over the past three years. Moreover, investors also need to be more vigilant and careful in selecting the right guarantor while investing in this sector.

The research questions formulated in this research include:
1. Does leverage affect profit growth?
2. Does cash holding affect profit growth?
3. Does tax planning affect profit growth?
4. Does tax planning have the ability to moderate the relationship between leverage and profit growth?
5. Does tax planning moderate the relationship between cash holding and profit growth?

**LITERATURE REVIEW**

**Agency Theory**
The organizational hypothesis was first proposed by Jensen and Meckling (1976). The agency hypothesis was presented as an arrangement between at least one individual called the administrator and several others assigned to act dynamically. It is important to note that organizational relationships depend on the agency hypothesis, which states that managers as organizational directors have more organizational data than outsiders.

The high-money property associated with the organizational hypothesis can trigger agency clashes, and Christina and Ekawati (2014) already showed that cash holding is the most misused liquid resource. The party with the minimum demand for the use of cash holding to fulfill profit is the supervisor.

**Trade-off Theory**
This hypothesis states that cash holding considers the boundary between costs and profits. This means the management of cash holding is important to the expansion of organizational value.

**Pecking Order Theory**
According to Jinkar (2011), this theory states that there is a succession of asset sources in determining the choice of financing. This means an organization can support business opening with internal reserves when it needs assets for speculative financing purposes. Moreover, the company does not also have ideal money and this means it generally needs to set aside the remaining money from its functional training.

**Leverage and Profit Growth**
The Debt to Assets Ratio equation shows that it is possible to estimate this proportion from total liabilities to add up resources. This means the two segments are the elements with the greatest influence on the proportion of liabilities to resources. According to Hanafi et al. (2012), all liabilities mean deciding its capacity to fulfill its long-term commitments to assets. Companies with high total liabilities to increase resources bear an increased risk of loss but also have the opportunity to earn greater profits. Therefore, a higher DAR ratio indicates a higher part of the company’s assets is financed using liabilities. This means a higher loan interest cost has to be paid by the company, thereby reducing the profits earned (Agustina, 2016). This led to the formulation of the following hypothesis.

**H1:** Leverage (Debt to Assets Ratio) has a significant effect on profit growth.

**Cash Holding and Profit Growth**
Das et al. (2009) reported cash as the most liquid asset usually claimed by a company. Moreover, money is the coins, banknotes, checks, cash requests, and cash available or deposited in a bank or other financial institutions. Meanwhile, cash equivalents are current and highly liquid speculations accessible to be converted into money and have a short development date, making their fair value quite insensitive to changes in loan costs.
A company usually anticipates profits from job training for one period, expecting that those made in one period should be more prominent than the previous to have positive development. This means profit growth is an adjustment to the rate of increase in profits obtained by a company during a specific period (Taruh, 2012). This, therefore, led to the development of the following hypothesis:

**H2:** Cash holding has a significant effect on profit growth.

**Tax Planning and Profit Growth**

Companies manage tax burden effectively to obtain financial benefits such as additional capital from funders through the share offering. It is, however, essential to note that publicly listed companies are more globally pronounced than those not listed. Therefore, the management is usually motivated to provide the ideal data on the company to build its offering value. Moreover, tax, as a component of profit allowances released to the government by the company, is usually streamlined and monitored by the management to have better net profit (Mahpudin, 2017).

Chen et al. (2011) examined the impact of tax planning and profit growth on available salaries. They found that tax planning companies with available salaries are slightly less instructive than those with lower ones. Furthermore, companies with high-profit growth have less beneficial book profits than those with low-paying executives controlling their tax planning. It was also discovered in a previous study that a reliable cross-effect for book payments and tax planning, especially the accuracy of book payments, is reduced by aggressive tax planning. This is, however, different from the findings of Ayers et al. (2009) that the content of available payment data on book payments was significantly lower for companies with high tax planning and substantially higher for those with lower income quality. Therefore, the following hypothesis is proposed:

**H3:** Tax Planning has a significant effect on profit growth.

**The Moderating Effect of Tax Planning on the Relationship between Leverage and Profit Growth**

Leverage is an effective tool in estimating the adequacy of utilizing a company’s liabilities. It makes it easy for companies to earn profits. It motivates them to endure adversity because monetary influence shows the organization imposes danger on investors, affecting stock returns (Prasetyorini, 2013).

According to Subramanyam (2012), profit is one estimate of job training. The figures for a period are usually itemized on the income statement and different sections such as revenues, expenses, gains, and losses. Companies with moderately stable incomes anticipate measures to assess future profits and usually pay a higher rate of profit as estimated earnings than those with fluctuating profits. This explanation shows that leverage does not significantly affect the company’s performance, but tax planning is needed to moderate leverage on profit growth. This, therefore, led to the formulation of the following hypothesis:

**H4:** Tax Planning moderates the relationship between leverage and profit growth

**The Moderating Effect of Tax Planning on the Relationship between Cash Holding and Profit Growth**

The assessment is an interaction to tidy up citizen organizations with the definitive purpose of achieving negligible burden of liability in both income tax and others which are in the government system. Suandy (2011) reported that cash holding could strengthen the assessment of anticipated profit growth, which led to the formulation of the last hypothesis as follows.

**H5:** Tax Planning moderates the relationship between cash holding and profit growth
The literature review was, therefore, used to develop the following research model.

![Research Model](image)

**Figure 2: Research Model.**

**METHOD**
The population used were the companies listed in the property & real estate sector of the Indonesia Stock Exchange (IDX) with an observation period of 2014 - 2018. The samples used were selected through a purposive sampling method based on the following criteria:

1. Manufacturing companies listed on the IDX.
2. Availability of the data required in the financial statements.
4. The currency used in the financial statements is the rupiah.

Secondary data in the form of annual statements were used in this research and they were obtained from the Indonesia Stock Exchange and the websites of each company. The optional information collection method involved using information such as the annual financial statement from each site which was summarized in Microsoft Excel and analyzed using STATA.

The number of companies used as samples based on the criteria indicated is as follows:

<table>
<thead>
<tr>
<th>Sample criteria</th>
<th>Number of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing companies in the Property and Real Estate sector listed on the IDX</td>
<td>61</td>
</tr>
<tr>
<td>in 2014-2018</td>
<td></td>
</tr>
<tr>
<td>Incomplete financial statement data</td>
<td>(29)</td>
</tr>
<tr>
<td>Companies that experienced losses during the 2014-2018 period</td>
<td>(6)</td>
</tr>
<tr>
<td><strong>Number of companies sampled</strong></td>
<td><strong>26</strong></td>
</tr>
<tr>
<td>Research period</td>
<td>5</td>
</tr>
<tr>
<td><strong>Number of final samples (26 x 5)</strong></td>
<td><strong>130</strong></td>
</tr>
</tbody>
</table>

*Source: Processed data, 2020*

**Dependent Variable**
Sugiyono (2018) reported as the influenced or independent variable, and profit growth was used as the
dependent variable in this research.

**Profit growth**
Profit was assessed based on the progress made annually, and the increase or decrease was used to determine the profit growth. It was calculated according to Andriyanti (2015) as indicated in the following formula:

\[
\text{Profit Growth} = \frac{\text{Operational Profit } \text{this year} - \text{Operational Profit } \text{last year}}{\text{Operational Profit } \text{last year}}
\]

**Independent Variables**
Sugiyono (2018) reported that the independent variable is usually called the free variable because it affects or causes a change in the dependent variable. Leverage and cash holding were used as independent variables in this research.

**Leverage**
The impact of this variable was assessed using the debt to assets ratio to estimate the extent to which the organization's resources are financed with liabilities starting from tenants and capital owned by investors. It was calculated based on the equation Ifada & Inayah (2017) which is stated as follows:

\[
\text{Debt to Asset Ratio (DAR)} = \frac{\text{Total Debts}}{\text{Total Assets}}
\]

**Cash Holding**
This is usually provided to financial backers as benefits, repurchased shares or cash saved to serve beneficial purposes in the not-too-distant future. This variable was calculated in line with Azlina et al. (2014) using the following formula:

\[
\text{Cash Holding} = \frac{\text{Cash Equivalent}}{\text{Total Assets}}
\]

**Moderating Variable**
This variable strengthens or weakens the relationship between the dependent and independent variables and tax planning was applied as the moderating variable in this research.

**Tax Planning**
Tax planning is a conscious effort made by citizens within legal limits to limit the burden of tax to be paid by people or substances (Appolos & Kwarbai, 2016). Companies conduct specified tax planning to increase benefits by limiting the duties to be paid. It is important to note that small taxes benefit companies by delegating the money to be paid to other tasks (Appolos & Kwarbai, 2016). This research used the Effective Tax Rate (ETR) in line with Appolos & Kwarbai (2016), and the variable was calculated using the following formula:

\[
\text{ETR} = \frac{\text{Income Tax Expense}}{\text{Profit Before Tax}}
\]

**RESULT AND DISCUSSION**

**Classic Assumption Test**

**Multicollinearity test**
A normal VIF of 1.13 was obtained while leverage, cash holding, and tax planning variables were recorded to have 1.16, 1.18, and 1.05, respectively, and this means the VIF < 10. This shows the evaluation process passed the multicollinearity test.
**Heteroscedasticity Test**
The test produced a Prob > chi2 of 0.3085, which means the research passed the heteroscedasticity test.

**Autocorrelation Test**
The Prob > F was found to be 0.7316, which means the research process passed the autocorrelation test.

**Hypothesis test**

<table>
<thead>
<tr>
<th>Table 3: Research Results using Random Effect Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL</strong></td>
</tr>
<tr>
<td>DAR</td>
</tr>
<tr>
<td>CH</td>
</tr>
<tr>
<td>ETR</td>
</tr>
<tr>
<td>_cons</td>
</tr>
</tbody>
</table>

| Number of obs | 130 |
| Number of groups | 26 |
| Wald chi2 (3) | 5.95 |
| Prob > chi2    | 0.1142 |
| sigma_u       | 0.61289755 |
| sigma_e       | 0.48417062 |
| Rho            | 0.61574366 |

*(fraction of variance due to u_i)*

*Source: Processed Data, 2020.*

The results were obtained using the random effect model approach and declared the most appropriate when testing the hypotheses.

<table>
<thead>
<tr>
<th>Table 4: Research Results for Moderating variable using Random Effect Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coeff.</strong></td>
</tr>
<tr>
<td>Daretr</td>
</tr>
<tr>
<td>Chet</td>
</tr>
<tr>
<td>Cons</td>
</tr>
</tbody>
</table>

| Number of obs | 130 |
| Number of groups | 26 |
| Wald chi2      | 3.62 |
| Prob > chi2    | 0.1636 |
| sigma_u       | 0.59709319 |
| sigma_e       | 0.4855096 |
| Rho            | 0.60199493 |

*(fraction of variance due to u_i)*

*Source: Processed Data, 2020.*

**Effect of Leverage on Profit Growth**
The side effect of the main speculative test was found to have a probability level of 0.053 and a negative
coefficient of -0.234224. Therefore, the leading theory (H₁) is rejected, which means the leverage did not significantly impact profit growth. The result is also in line with the previous finding of Hanafi et al. (2012).

**Effect of Cash Holding on Profit Growth**

The side effect of this hypothesis showed a probability level of 0.031 and a positive coefficient of 0.407215. Therefore, H₂ was accepted, and this means there is a significant effect of cash holding on profit growth. This is following the findings of Taruh (2012) that cash holding significantly affected profit growth.

**Effect of Tax Planning on Profit Growth**

The side effect of this theory had a probability level of 0.016 and a positive coefficient of 0.0027558. Therefore, H₃ was accepted, and this means tax planning has a significant effect on profit growth. This is following the findings of Suandy (2011) that cash holding can strengthen tax planning on profit growth.

**The Moderating Effect of Tax Planning on the Relationship between Leverage and Profit Growth**

The side effect of this hypothesis showed a probability level of 0.885 and a positive coefficient of 0.0271182. Therefore, H₄ was rejected, which means tax planning did not have a definite critical impact and could not moderate the relationship between leverage and profit growth. This is different from the findings of Hanafi et al. (2012) that tax planning can strengthen the effect of leverage on profit growth.

**The Moderating Effect of Tax Planning on the Relationship between Cash Holding and Profit Growth**

The analysis showed the probability level of this hypothesis was 0.909 with a negative coefficient of -0.0063028. Therefore, H₅ was rejected and this means cash holding did not have significant detrimental consequences on profit growth based on the tax planning. This is also different from the findings of Suandy (2011) that cash holding can strengthen tax planning on profit growth.

**CONCLUSION**

The findings showed that leverage did not have any significant effect on profit growth and this is associated with the fact that more debt funding usually makes it very difficult for companies to obtain loans. It was also discovered that cash holding significantly affected profit growth to ensure the company maintains cash at an optimal level. Moreover, tax planning also had a significant effect on profit growth. This means the organization can increase profits through effective management of expenses and better cost management. Meanwhile, tax planning was observed to be unable to moderate the relationship between leverage and profit growth. Organizations can't increase profits as expected when high-cost management organizations generally have lower salaries than low-cost ones. Tax planning was also unable to moderate the relationship between cash holding and profit growth because the factors affecting the profit growth of an organization also influence the profits circulated to the investors.

These findings are beneficial to the management to ensure companies obtain positive profit growth without losses. The founders or investors are also expected to benefit through the proper analysis of the annual statement, making it easier for them to make investment decisions. Further research is, however, needed with the use of more samples, different variables, and different sectors for a more comprehensive analysis.
REFERENCES


