



The Effect of Corporate Tax Avoidance on the Level of Corporate Cash Holdings: Evidence from Indonesian Public Listed Companies

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Abstract

This study aims to examine the effect of corporate tax avoidance to the corporate cash holdings. Recent tax avoidance research found that tax avoidance is able to facilitate managerial rent extraction in the form of transfer of resources owned by the company. This study attempts to test how the relationship of tax avoidance with the amount of cash held by the company. The sample consists of 46 non-financial, non-property, non-real estate and non-construction companies from 2009-2016, with a total 368 observations. The study uses two different cash holdings measures to test the robustness of the research results. This study cannot find evidence that tax avoidance have a significant relationship to the level of cash holdings in public companies in Indonesia. Both measurements of cash holdings gave the same conclusions to the results of the study. This study provides an insight that agency theory in the context of tax avoidance and corporate cash holdings in developing countries such as Indonesia needs to be explored further as the agency conflict in Indonesia as a developing country is more principal-principal conflicts.³

JEL Classification: M40, M48, K34, K42.

Keywords: Tax avoidance, cash holdings, corporate finance.

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1. Introduction

Tax avoidance within a company is all activities done by a company that results in a reduction of corporate taxes (Dyreng et al. 2008). OECD (Organization for Economic Co-operation and Development) describes that tax avoidance is a taxpayer's effort to reduce tax payable, even though this attempt may not be in violation of the law, but in fact it is contrary to the purpose of tax legislation. For the reason of tax avoidance is an act that is not against the law, it is then utilised by all taxpayers including corporate taxpayers, that as a human is rational and opportunistic, to minimise tax expenses. Moreover, big companies that are go public are more focused on the interests of shareholders than they have to pay taxes. While it is argued that tax avoidance practices can make tax paid by the company to be smaller, and hence it will maximise shareholder value (Hanlon and Heitzman, 2010), this practice can be harmful as it increases the tax risk of the company.

Most recent literature found that traditional theory of tax avoidance arguing that tax avoidance as value maximisation for shareholders is not empirically proven (Santana and Rezende 2016; Chen et al. 2014). More corporate managers are found not to act as good agents because they can take advantage from tax avoidance activities for their personal gains. These tax avoidance practices which were originally regarded as a value-adding tool for shareholders provide an opportunity for managers as the control holder of the company to take the company's resources through various attempts in long periods (Kim et al. 2010). If it is associated with the company's cash holdings, it will be highly correlated, since cash is a very liquid asset type so that it will be very easily converted by managers for personal gains (Myers & Rajan 1998). This is found by Dhaliwal et al. (2011) that there is a negative relationship between corporate tax avoidance activities and level of cash owned by the company.

Basically, from the side of the company, there are three motives of cash holdings (Keynes 1936) which are speculative motive, transaction motive, and precautionary motive. In this case, in regards to the results of research Dhaliwal et al. (2011), the amount of company's cash holdings could endanger the activities of the company and the interests of the owners of the company due to potential cash transferred by agent of the company's: manager. Having this background, the purpose of this study is to examine how is the effect of tax avoidance on the level of cash held by public companies in the case study of Indonesia. Following Dhaliwal et al. (2011), this study examines the relationship between tax avoidance and corporate cash level in the context of a developing country i.e. Indonesia. This study extends the previous study in Indonesia conducted by Melinda (2013) that found a non-significant relationship between tax avoidance with the level of corporate cash holdings. Compared to the current study, the study of Melinda is only based on one period (cross section) data analysis. This current study is based on more sophisticated panel data collected from periods of 2009-2016. Moreover, this study tests the resilience of the literature in the case of the robustness of the results as it uses two proxies of cash holdings which are mostly used by previous studies. Following the introduction, literature review will be discussed in the next section. Research methodology then is presented followed by analysis of results and discussions. Finally, conclusions are drawn in the last section.

2. Literature Review and Hypothesis Development

2.1 Agency Theory and Tax Avoidance

In the context of modern corporations, where there is separation between agent (management) and principals (owners), it is argued that the agent does not always act and perform its duties in the best interests of owners. Due to the asymmetric information between agent and principals, tax avoidance activities, in this case, can be used as a tool to facilitate the opportunistic behaviour of managers which at the end increasing costs borne by the owners (Dhaliwal et al. 2011).

Tax avoidance as part of tax planning can be differentiated from tax evasion, that in contrast to tax evasion, tax avoidance is conducted without violating the prevailing laws and regulations. Nevertheless, tax avoidance is such controversial activities as while a company as a taxpayer may have right to reduce the tax burden in accordance with the law, but such action is deliberately arranged and planned to minimise tax payable which at the end can be defined as illegal acts as conflicting with the law spirit (Avi-Yonah 2008; Prebble and Prebble 2010). The tax avoidance behavior undertaken by a firm provides marginal benefits and marginal costs (Chen et al. 2010). Companies should be careful in analysing and considering every action taken, including tax management through tax avoidance.

The benefits that can be obtained by the company through tax avoidance are a significant tax savings of which can be transferred to owners of the company. With the action of tax savings, the tax burden paid becomes smaller so that the net income of the company becomes larger. Managers can also get benefit from the tax avoidance activities which is a higher compensation or bonus since they are perform well minimising the tax burden paid by the company, thus benefiting the owners of companies with greater profit as well. nevertheless, managers can do rent extraction too. This is an action which the managers undertake to prioritise and maximise his personal interests, not the interests of the company owners. Measures taken by managers such as the preparation of aggressive financial statements, transactions with privileged parties, or taking resources or assets of the company to meet personal interests (Chen et al., 2010).

While providing marginal benefits, tax avoidance behaviour has some costs that may be borne by the company. The company may get tax penalties imposed on tax fraud, and may affect the fall in stock prices if its known to the public (Desai and Dharmapala, 2006). According to Frank et al. (2009), when the fraudulent taxation of the company is found by the examination and taken through unlawful means, the company must get sanction from the tax authorities. At the end, the company bears other costs such as reputational costs and political costs (Hanlon and Slemrod 2009). The company's falling reputation and decreasing stock prices are caused by investors' negative perceptions of the company, as it indicates the existence of a rent extraction action by corporate managers that can harms shareholders (Desai and Dharmapala 2006).

2.2 Tax Avoidance and Cash Holdings

In contrast to the traditional theory that argues tax avoidance finally benefits the owners of the company, in the context of agency theory, it is clear that tax avoidance is an opportunistic behaviour of managers that benefits their own. To cover this opportunistic behaviour, managers attempts to limit some firm specific information (Kim et al. 2010). This exacerbates the asymmetric information between agent and owners which then causes company's asset transferred to the agent (Dhaliwal et al. 2011). In this regards, the most liquid asset namely cash

is predicted to be the assets that mostly transferred or wasted by the agent, as argued by Dhaliwal et al. (2011) that while tax savings due to tax avoidance may benefit companies by increasing the cash flows, this condition may be inverted as tax avoidance facilitate managers to do more opportunistic behaviours and therefore cause more harm to the owner of the company.

Based on discussion above, the hypothesis of this study is as follows:

H₁: Tax avoidance affects negatively to company's cash holdings

3. Research Methodology

3.1 Overview

Triggered by Dhaliwal et al. (2011) which found that tax avoidance is able to facilitate managers in transferring resources i.e. company's cash, this research attempts to answer how is the influence of tax avoidance to the level of cash holdings in public companies. This research takes Indonesia as a background of the study as it is interesting to find evidence from one of developing countries which currently the regime applied tax amnesty. Since tax avoidance requires more confidential information and found as a tool for managers to perform managerial extraction and the nature of cash which is a very liquid asset and very easy to be converted by managers, this research attempts to examine the effect of tax avoidance on cash held by companies in public companies of Indonesia. Having longer research horizon, this study contributes to literature of tax and corporate finance as so far there is only one similar study found in Indonesia which is only based on limited cross-section data.

3.2 Research Method

This research is a quantitative study using secondary data which is collected from company's audited financial statements. The sample is all public companies in Indonesia listed on the Indonesia Stock Exchange with some exceptions to certain sectors due to different tax regulations such as application of final tax i.e. property, real estate, and construction sectors. This study also excludes more regulated industry i.e. financial companies. The design of this research is data panel analysis with periods from 2009-2016. Table 1 depicts the sample selection.

Table 1. Sample Selection Method

| Number | Criteria | Number of Companies |
|------------------------|---|---------------------|
| 1. | Companies registered in BEI period 2009-2016 | 540 |
| 2. | Companies that belong to the financial sector | (92) |
| 3. | Companies belonging to the property, real estate, and construction sectors | (61) |
| 4. | Companies that do not have complete audited Annual Financial Statement data | (114) |
| 5. | Companies that have experienced pre-tax loss during 2009-2016 | (175) |
| 6. | Companies that are undergoing tax refund during 2009-2016 | (26) |
| 7. | Companies with Cash Effective Tax Rate (CETR) values > 1 | (26) |
| Number of Samples | | 46 |
| Number of Observations | | 368 |

3.2 Data Analysis

This study adopts the model of Dhaliwal et al. (2011) which was originally developed by Opler et al. (1999):

$$\text{CHENA}_{i,t} = \alpha_0 + \beta_1 \text{TAXAVOID}_{i,t} + \beta_2 \text{GRTH}_{i,t} + \beta_3 \text{SIZE}_{i,t} + \beta_4 \text{NWC}_{i,t} + \beta_5 \text{CAPEX}_{i,t} + \beta_6 \text{LEV}_{i,t} + \beta_8 \text{DIVPAY}_{i,t} + \beta_9 \text{CFO}_{i,t} + \varepsilon_{i,t}$$

where:

$\text{TAXAVOID}_{i,t}$ = Tax avoidance, measured by Cash ETR calculated by cash tax payment divided by profit before tax of company i in year t.

$\text{CHENA}_{i,t}$ = Cash holdings, measured by the natural logarithm of the ratio of cash and cash equivalents divided by net assets (total assets minus cash and cash equivalents) firm i in year t; for robustness test, CHETA which is ratio of cash and cash equivalents divided by total assets of firm i in year t will be used.

$\text{GRTH}_{i,t}$ = Growth of a company, measured by book value of debt plus market value of equity divided by total assets of firm i in year t

$\text{SIZE}_{i,t}$ = Size of a company, measured by the natural logarithm of total assets of firm i in year t

$\text{NWC}_{i,t}$ = Net working capital, measured by net of cash and cash equivalents divided by net asset of company i in year t.

$\text{CAPEX}_{i,t}$ = Investment of a company, measured by capital expenditure divided by net asset of company i in year t.

$\text{LEV}_{i,t}$ = Leverage, measured by total debt divided by total assets of firm i in year t.

$DIVPAY_{i,t}$ = Dividend policy, measured by a dummy variable score of 1 if the company distributes a dividend score of 0 otherwise.

$CFO_{i,t}$ = Cash flows of a company, measured by cash flows from operating activities divided by net asset of company i in year t .

4. Results

4.1 Outlier Test

Based on Table 2 below, it can be seen that all data variables have a value of p-value <0.05 , it means data is not normally distributed, therefore the data needs to be winsorized.

Table 2. Shapiro-Wilk Test Results

| Variables | Observation | W | V | z | Prob>z |
|-----------|-------------|---------|---------|--------|---------|
| CHENA | 368 | 0.73867 | 66.775 | 9.958 | 0.00000 |
| CHETA | 368 | 0.89379 | 27.139 | 7.824 | 0.00000 |
| TAXAVOID | 368 | 0.88300 | 29.895 | 8.053 | 0.00000 |
| GRTH | 368 | 0.78675 | 54.489 | 9.476 | 0.00000 |
| SIZE | 368 | 0.50854 | 125.578 | 11.455 | 0.00000 |
| NWC | 368 | 0.98364 | 4.181 | 3.391 | 0.00035 |
| CAPEX | 368 | 0.9215 | 20.059 | 7.108 | 0.00000 |
| LEV | 368 | 0.94805 | 13.275 | 6.129 | 0.00000 |
| DIVDUMMY | 368 | 0.97109 | 7.388 | 4.74 | 0.00000 |
| OCF | 368 | 0.78564 | 54.773 | 9.488 | 0.00000 |

4.2 Descriptive Statistics Analysis

Table 3. Descriptive Statistics (after Winsorization)

| Variables | Observation | Mean | Std. Dev. | Min | Max |
|-----------|-------------|-------------|-------------|------------|--------------|
| CHENA | 368 | 0.1850624 | 0.1820081 | 0.008029 | 0.9561303 |
| CHETA | 368 | 0.1399056 | 0.108164 | 0.007965 | 0.4887866 |
| TAXAVOID | 368 | 0.3164299 | 0.1671257 | 0.05713 | 0.9668318 |
| GRTH | 368 | 2.091398 | 1.429452 | 0.630335 | 8.781985 |
| SIZE | 368 | 17700000.00 | 35400000.00 | 135849.50 | 214000000.00 |
| NWC | 368 | 0.1286213 | 0.187847 | -0.279723 | 0.5414513 |
| CAPEX | 368 | -0.0746092 | 0.0529155 | -0.233458 | -0.005586 |
| LEV | 368 | 0.202198 | 0.1456816 | 0.001577 | 0.5972779 |
| DIVDUMMY | 368 | 0.8722826 | 0.3342293 | 0 | 1 |
| OCF | 368 | 0.1262191 | 0.0778975 | -0.0130001 | 0.4202932 |

Table 3. shows descriptive statistics of this study. Cash holdings is proxied by CHENA (the natural logarithm of the ratio of cash and cash equivalents to net assets, where net assets represent total assets minus cash and cash equivalents) and CHETA (cash and cash equivalents to total assets). The figure of CHENA shows that on average the companies have cash totaling 18.51% of net assets (with no cash and cash equivalents). A company that has the smallest CHENA ratio is PT. Tiga Pilar Sejahtera Food Tbk which is 0.8% while the highest is PT Bukit Asam (Persero) Tbk with 96%. The figure of CHETA is 14% of total assets owned. The company with the smallest CHETA ratio is PT Arwana Citramulia Tbk which is 0.8% while the largest CHETA ratio is PT Bukit Asam (Persero) Tbk with a value of 49%. Then the average rate of tax avoidance of the sample company is 32%, with range 0% to 100%, it can be considered that the level of tax avoidance of companies is quite high in Indonesia.

A growth opportunity denoted by GRTH is 209.13% meaning that the sample companies in this study have a high growth opportunity because the value has already exceeded 100% which means the sample company has a market value greater than its asset value which is based on book value. Companies with the lowest growth opportunity value are PT Colorpak Indonesia Tbk, PT Ekadharma International Tbk, PT Gema Grahasarana Tbk, PT Jakarta International Hotels & Development Tbk, PT KMI Wire and Cable Tbk and PT Multi Indocitra Tbk with a value of 63.03%. Then the companies with the highest growth opportunity value are PT Surya Citra Media Tbk, PT Kalbe Farma Tbk, PT Ace Hardware Indonesia Tbk, PT Adaro Energy Tbk, and PT Sumber Alfaria Trijaya Tbk, with the value of 878.19%. The size of the company denoted by SIZE having average is Rp 17.7 trillion, with the lowest value of Rp 135.8 billion is PT Pyridam Farma Tbk while the largest is PT Astra International Tbk with total assets of Rp 214 trillion. Net working capital denoted by NWC shows that on average 13% of non-cash current assets can be used as a source of liquidation by the sample company in the short term. In regards to the average of net asset which is Rp15.3 trillion, it can be known that Rp 1.9 trillion of net working capital can be converted into cash in the near term. Then the smallest net working capital value is -28%; this happens because there is a sample company whose total liabilities smoothly exceeds the total current assets, which is PT Jasa Marga (Persero) Tbk while the largest net working capital value is 54.14% owned by PT MultiIndocitra Tbk.

Capital expenditure denoted by CAPEX shows that on average capital expenditure of the sample companies is -7.4%. This figure shows that the sale of the company's fixed assets is greater than the amount of its fixed asset purchase. The minimum value of the capital expenditure is -23.3% owned by PT Jasuindo Tiga Perkasa Tbk means the company sold 23.3% of its fixed assets from net assets. On the other hand, the maximum value of capital expenditure is -0.5% owned by PT Trikonsel Oke Tbk. Then, leverage denoted by LEV shows that on average leverage of the sample company is 20.2%; this indicates that the sample company has 20.2% leverage to its total assets. With the average total assets of the sample companies of Rp 17.7 trillion, the average leverage of the sample companies in rupiah is Rp 35.7 trillion. The lowest LEV value is owned by PT Bukit Asam (Persero) Tbk of 0.15% while the highest LEV is PT Trikonsel Oke Tbk which is 60%.

Dividend payment denoted by DIVDUMMY shows that on average only 87.2% of the sample companies pay dividends. It also shows that during the research periods most companies make dividend payments during the study period. The other control variable which is cash flow of the operating activities denoted by OCF shows that on average cash flow from the company's sample operation activity is 13%. This figure means that with average net assets of Rp 15.3 trillion, the average total cash flows from operating activities in rupiah currency units amounted

to Rp 1.9 trillion. The minimum value of OCF variable is owned by PT Kalbe Farma Tbk (-1.3%) while the maximum value is 42% owned by PT Bukit Asam (Persero) Tbk.

4.3 Selection of Panel Data Model

This research is based on panel data where the determination of the model is done through three stages. The first test is Chow test to determine whether the model is Pooled Least Square (PLS) model or Fixed Effect (FE). The next test is Breusch-Pagan Test Lagrangian Multiplier (BPLM) to determine whether the model is PLS model or Random Effect (RE). The final test is Hausman test to determine whether the data fit for FE or RE models. Based on the tests, the best model is random effect (for proxy CHENA) while for the robustness model (using proxy CHETA) is a fixed effect model.

4.4 Classical Assumption Test Results

Table 4. Results of Multicollinearity Test

| Variables | VIF | 1/VIF |
|-----------|-------|----------|
| SIZE | 23.06 | 0.043367 |
| DIVDUMMY | 8.99 | 0.111280 |
| OCF | 4.61 | 0.216940 |
| TAXAVOID | 4.58 | 0.218307 |
| GRTH | 4.52 | 0.22110 |
| CAPEX | 3.69 | 0.271361 |
| LEV | 3.60 | 0.27750 |
| NWC | 1.70 | 0.587926 |
| Mean VIF | 6.84 | |

This study uses a linear regression which must qualify Best Linear Unbiased Estimates (BLUE). Three stages of testing from the classical assumption were conducted which are multicollinearity test, heteroskedasticity test, and autocorrelation test. Table 4 shows that the average value of VIF is 6.84 which means less than 10. Hence, the assumption of multicollinearity is not violated by the variables.

The second BLUE test which is heteroscedasticity test applies only to PLS and Fixed Effect panel data models whereas the Random Effect model of this assumption is not violated because the test will use Generalized Least Square (GLS). Therefore, the heteroscedasticity test was conducted only for the second model, robustness model using CHETA. The result shows that $\chi^2(46) = 2732.81$ and $\text{Prob} > \chi^2 = 0.0000$. As the value of $\text{Prob} > \chi^2$ less than 0.05, the second model has heteroscedasticity problem.

The last classical BLUE assumption requirement is an autocorrelation which ensures that observation data have no time-to-moment relationship. Wooldridge test was conducted to ascertain whether the model has an autocorrelation problem. The basis for determining the violation of this assumption is seen from $\text{Prob} > F$ if the value is lower than 0.05 then there is a violation of this assumption. This test was conducted only on the second model because the assumption is still the same, that is the first model using Random Effect autocorrelation assumption is also not violated due to using GLS. The results of this assumption test are $F(1, 45) = 21.893$ and $\text{Prob} > F = 0.0000$ meaning that for the second model has an autocorrelation

problem. The second model, however, is regressed with DriscollKraay standard errors Fixed Effect to solve the autocorrelation problem.

4.5 Simultaneous Effect Test (F-test) and (Chi²-test)

Table 5 shows that for the first model using a random effect the Chi² value equals to 0.0000 which is less than p-value 0.05; this means that independent variables together are simultaneously able to influence variable dependent. Similar to the first model, the second research model that uses fixed effect also gives the value Prob> F for 0.0000 as shown in Table 6.

The first model using random effect has R-Squared 0.2856 meaning that 28.5% of the independent variables can explain cash holdings of a company while the second model using fixed effect shows R-Squared much higher which is 0.3276 meaning that 33% independent variables can explain cash holdings of a company.

4.6 Analysis of Hypothesis Testing Results

Table 5. Regression Test Results First Model with Random Effect

| CHENA | Coef. | Std. Err. | z | P> z | [95% Conf. Interval] | |
|--------------------|------------|--|-------|----------|----------------------|---------|
| TAXAVOID | -0.1168356 | 0.19907 | -0.59 | 0.557 | -0.5069959 | 0.27332 |
| GRTH | -0.0133226 | 0.03381 | -0.39 | 0.694 | -0.0795839 | 0.05294 |
| SIZE | 0.0606593 | 0.04911 | 1.24 | 0.217 | -0.0355897 | 0.15691 |
| NWC | -1.39055 | 0.32971 | -4.22 | ***0.000 | -2.036775 | -0.7443 |
| CAPEX | -0.156941 | 0.67638 | -0.23 | 0.817 | -1.482622 | 1.16874 |
| LEV | -3.100857 | 0.41585 | -7.46 | ***0.000 | -3.915901 | -2.2858 |
| DIVDUMMY | 0.0397748 | 0.10984 | 0.36 | 0.717 | -0.175512 | 0.25506 |
| OCF | 3.155909 | 0.48635 | 6.49 | ***0.000 | 2.202674 | 4.10914 |
| _CONS | -2.661119 | 0.77865 | -3.42 | 0.001 | -4.187242 | -1.135 |
| Number of Obs. | 368 | Description: CHENA = natural logarithm of the ratio of cash and cash equivalents to net assets in which net assets represent total assets minus cash and cash equivalents; CHETA = cash and cash equivalents to total assets; TAXAVOID = measured by using a Cash Effective Tax Rate wherein the cash in taxes divided by profit before tax; GRTH = using Tobin's Q ratio; SIZE = natural logarithm of total assets; NWC = Ratio of net working capital with net assets; CAPEX = ratio of capital expenditures to net assets; LEV = ratio of total liabilities to total assets; DIVDUMMY = is a dummy variable of dividend payment "1" if it pays "0" otherwise; OCF = cash flow ratio from operating activities to net assets. Signs *, **, *** signify significance at successive levels of 10%, 5%, and 1%. | | | | |
| Wald chi2(8) | 145.07 | | | | | |
| Prob > chi2 | 0 | | | | | |
| R-Squared (within) | 0.2856 | | | | | |

Table 5 shows further that tax avoidance (TAXAVOID) has a coefficient and p-value of -0.1168 and 0.557 respectively meaning not significant to cash holdings. The table also presents that many control variables are not significant to cash holding policy of a company, which are growth opportunities (GRTH) with p-value of 0.694, firm size (SIZE) with p-value value of 0.217, capital expenditure (CAPEX) with p-value of 0.817, and dividend payment (DIVDUMMY) with p-value of 0.717.

Control variables which are significant explaining the cash holdings policy are explained as follows. Net working capital (NWC) has a coefficient and p-value of -1.39055 and 0.000 (significant at 1% level) respectively. Hence, it can be said that net working capital variable has a significant negative effect to the company's cash holdings, proxied by CHENA. Then, leverage (LEV) has a coefficient and p-value equals to -3.100857 and 0.000 (significant at level 1%). Finally, the cash flow from operating activities (OCF) shows a coefficient and p-value value of 3.155909 and 0.000 respectively bringing a conclusion that cash flow from operating activities has a significant positive relationship.

Table 6 below shows a similar conclusion to the first model for the relationship between tax avoidance and cash holdings policy as the results is insignificant. Some control variables are also not significant, which are growth opportunities (GRTH), firm size (SIZE), capital expenditure (CAPEX), and dividend payout (DIVDUMMY).

**Table 6. Second Regression Model Results
(with Driscoll-Kraay standard errors Fixed Effect)**

| CHETA | Coef. | Std. Err. | t | P> t | [95% Conf. Interval] | |
|----------------|------------|---|--------|----------|----------------------|------------|
| TAXAVOID | -0.0131882 | 0.01766 | -0.75 | 0.479 | -0.054945 | 0.0285687 |
| GRTH | -0.005053 | 0.00269 | -1.88 | 0.103 | -0.011419 | 0.001314 |
| SIZE | -0.009275 | 0.00316 | -2.94 | **0.022 | -0.016736 | -0.0018144 |
| NWC | -0.112636 | 0.04005 | -2.81 | **0.026 | -0.20733 | -0.0179419 |
| CAPEX | -0.059343 | 0.05836 | -1.02 | 0.343 | -0.197338 | 0.0786515 |
| LEV | -0.308229 | 0.02339 | -13.18 | ***0.000 | -0.363535 | -0.2529222 |
| DIVDUMMY | 0.0014259 | 0.00638 | 0.22 | 0.830 | -0.01367 | 0.016522 |
| OCF | 0.3769583 | 0.0461 | 8.18 | ***0.000 | 0.267958 | 0.4859587 |
| _CONS | 0.3202667 | 0.06506 | 4.92 | 0.002 | 0.1664141 | 0.4741194 |
| Number of Obs. | 368 | Description: CHENA = natural logarithm of the ratio of cash and cash equivalents to net assets in which net assets represent total assets minus cash and cash equivalents; CHETA = cash and cash equivalents to total assets; TAXAVOID = measured by using a Cash Effective Tax Rate wherein the cash in taxes divided by profit before tax; GRTH = using Tobin's Q ratio; SIZE = natural logarithm of total assets; NWC = Ratio of net working capital with net assets; CAPEX = ratio of capital expenditures to net assets; LEV = ratio of total liabilities to total assets; DIVDUMMY = is a dummy variable of dividend payment "1" if it pays "0" otherwise; OCF = cash flow ratio from | | | | |
| F(8, 7) | 837.74 | | | | | |
| Prob > F | 0.0000 | | | | | |
| R-squared | 0.3276 | | | | | |

| | | |
|----------|--|--|
| (within) | | operating activities to net assets. Signs *, **, *** signify significance at successive levels of 10%, 5%, and 1%. |
|----------|--|--|

The other control variables are significant namely net working capital (NWC), leverage (LEV) and cash flow from operating (OCF). Net working capital is significant (at alpha 5% level) with a coefficient of -0.112636 meaning that every 1% increase in the net working capital variable will decrease the company’s cash holdings by 11.26%. Then, leverage (LEV) has a coefficient and p-value value of -0.308229 and 0.000 (significant at alpha 1%) respectively. Operating cash flows is also significant with a coefficient of 0.000.

5. Discussion

Due to tax avoidance allegedly able to facilitate managers to transfer resources of the company, this research attempted to answer how tax avoidance affects ownership of cash of public company in Indonesia. Based on the results above, it is concluded that the findings of the study are similar to Melinda (2013) that in the context of Indonesia there is no evidence that tax avoidance activities influence cash holdings of a company. The corporate policy of cash holdings can be explained only by control variables of net working capital, leverage and operating cash flows. As the study found non-significant growth value to cash holdings, the result is consistent with the anecdote that firms with small growth opportunities have more cash than firms with high growth opportunities because they are overseen by investors. The other controlling variables namely capital expenditure, growth, size and dividend policy of a company are neither able to explain the amount of cash held by the company.

This study which cannot find the effect of tax avoidance on the level of cash of the company provides an insight that agency theory in the context of tax avoidance and corporate cash holdings in developing countries such as Indonesia needs to be explored further as the agency conflict in Indonesia as a developing country is different to developed countries. Found by Claessens et al. (2000), the agency conflict in Indonesia is more principal-principal conflicts, not principal-agent conflicts.

6. Conclusion

The objective of this study is to examine the relationship between the amount of cash held by a company and tax avoidance. Based on eight-year research horizon with 368 observations collected from Indonesian public companies, nevertheless, this study is unable to find this relationship. The findings of this study still cannot find evidence that tax avoidance has a significant effect on the level of firm cash holdings in Indonesian public companies, as found by previous studies in Indonesia. More comprehensive data and more proxies may improve the results.

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