Indonesian Listed Firms, Corporate Tax Avoidance, and Tax Haven: Evidence from the ICIJ Offshore Leaks Database

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ABSTRACT

This study aims to investigate the involvement of Indonesian firms in tax haven jurisdiction and their corporate tax avoidance activities. Employing Indonesian companies listed in the Indonesia Stock Exchange and the ICIJ Offshore Leaks Database from 2005-2016, this study found that Indonesian companies with tax haven operations as documented in the offshore database have a lower Cash Effective Tax Rate (CETR) and Book Effective Tax Rate (BETR) relative to companies which presumably are unrelated to tax haven jurisdiction based on the leaks data. This study found evidence that companies with tax haven operations as indicated in the ICIJ Offshore Leaks Database have higher cash holdings compared to the counterparts. In this case, those companies also have lower leverage relative to the companies without tax haven operations. Additionally, we also found that firms involved in tax haven operations have a lower return on assets and capital expenditures compared to firms that are not established in a tax haven jurisdiction. The findings of this study are significant to identify the characteristics attached to companies with tax haven operations and extend previous literature studies by providing evidence on the characteristics of companies in developing countries which use tax haven operations.

KEYWORDS: Corporate Tax Avoidance; Indonesian Listed Firms; Offshore Leaks; Panama Papers; Tax Haven
INTRODUCTION

The Panama Papers, Offshore Leaks, and Paradise Papers publications have created mass shock to the public. Not only have they shown the pervasiveness of the usage of tax havens, but they also drag thousands of companies and even top leaders and politicians from various countries to be involved in tax fraud schemes. While governments of various countries tend to be more attached to tax revenue, those information leaks therefore provide a very good setting to examine one of the corporate tax avoidance schemes, namely tax havens. As investigations taken by governments are more likely to be a corrective control, those actions may not help governments to mitigate similar problems in the future. Accordingly, there is an urgent need from empirical research to help governments in detecting tax haven schemes as soon as possible to avoid the possible negative effects.

This so-called Offshore Leaks Database provides insights into the operations of roughly 785,000 shell companies that were incorporated in tax havens around the world over the past 45 years. We use data from the Offshore Leaks Database provided by the International Consortium of Investigative Journalists (ICIJ) to identify Indonesian publicly listed firms that are users of secret offshore vehicles in tax haven jurisdictions. We then compare the level of corporate tax avoidance activities and firm characteristics of the firms we identify to those of other firms using a firm matching methodology. If sheltering is used predominantly for diverting resources or illegal payments, the data leaks should be associated with higher corporate tax avoidance activities among firms with secret offshore vehicles.

One of the advantages of having a tax haven operation is the possibility to send companies’ income to those very low- or no-tax jurisdictions. Consequently, those companies may lower their overall tax payments. However, it might leave traces when those companies send their money to tax haven locations. The most obvious trail for that shifting scheme is a lower effective tax rate that companies pay to the tax authorities. In addition, by facing a lower tax rate for their taxable income, those companies may have higher cash tax savings which can be utilized for their operations. Accordingly, they may have lower debts and leverage relative to their counterparts. This study therefore uses information provided in the Panama Papers, Offshore Leaks, and Paradise Papers to identify those traces. Specifically, this study examines the characteristics that can differentiate between the perpetrators of tax havens and their counterparts.

Using Indonesian firms listed in the Indonesia Stock Exchange and Offshore Leaks Database from 2005-2016, this study documents evidence that Indonesian companies with tax haven operations as documented in the offshore database have a lower Cash Effective Tax Rate (CETR) and Book Effective Tax Rate (BETR) relative to companies without involvement in a tax haven based on that leaks data. The results may indicate that the effect of having a tax haven operation is the reduction of tax payments. Moreover, as predicted, this study has found evidence that companies with tax haven operations as indicated in the Panama Papers, Offshore Leaks, and Paradise Papers have higher cash holdings compared to the counterparts. In this case, those companies also have lower leverage relative to companies without tax haven operations. Additionally, we also have found that firms involved in tax haven operations have a lower return on assets and capital expenditures compared to firms without an establishment in a tax haven jurisdiction. Overall, those results show that by having operations in tax havens, companies can generate higher cash tax savings to be used for their operations.
The findings of this study are important for several reasons. First, as this study identifies the characteristics attached to companies with tax haven operations, the results are important for government tax officials. While they cannot expect to get information leaks like the Panama Papers, Offshore Leaks, and Paradise Papers frequently, they can use the findings of this study to detect the tax haven perpetrators. By doing so, they can take further actions to prevent negative effects as a result of tax avoidance by using a tax haven scheme. Second, this study extends previous literature studies by providing evidence on the characteristics of companies which use tax haven operations. Prior studies have focused on observable offshore activities, using data on the multinational affiliates of firms (Faulkender & Smith, 2016), subsidiaries of U.S. firms from 10-Ks (Dyreng & Lindsey, 2009), subsidiaries of global firms (Bennedsen & Zeume, 2018) or detected tax shelter cases from news reports (Graham & Tucker, 2006). Although self-reported or detected offshore activities can help to identify the costs and benefits associated with tax haven activities, such observable activities may differ from secret ones. We instead rely on firms that are detected for an exogenous reason, a leak of the offshore service provider’s data.

Base erosion and profit shifting (BEPS) are strategies for tax planning and are needed to eliminate taxes. The fundamental goal is for companies to pay taxes or pay a very little percentage of taxes from their overall income. BEPS usually occurs in countries that are not developing fast and are not up to date with information such as technology related. The transactions that happen between countries, however, actually make a problematic situation when the country is not prepared in anticipating the developments that happen, which lead to loopholes in the imposed tax rules. Base erosion and profit shifting become a problem because base erosion means the income tax decreases, which affects the taxation process in many countries by doing profit shifting. BEPS has shown a decrease in tax policies or the systems of countries that have tax treaties. It has also been mentioned that inside the country itself the tax rules have decreased such as anti-avoidance rules and transfer pricing. In 2013, OECD concluded in a report of base erosion and profit shifting that a huge percentage of firms has been practicing it, and it has been even more destructive. As a result, the tax compliance and fairness issue has risen. By observing prior research made regarding U.S firms that have been utilizing this scheme, it is called profit shifting. The reason for profit shifting is highly dependent on the effective income tax rate that is imposed on the firm (Lambok & Jasman, 2018)

In the context of corporate tax planning in Indonesia, empirical evidence shows that long run corporate tax avoidance strategies will lead to a lower firm value, which was associated with the risk minimization perspective of corporate tax avoidance (Soepriyanto, 2018). This line of argument suggests that aggressive tax strategies may diminish the firm values, as investors consider them as risky strategies. In a more recent study regarding Indonesian tax amnesty during 2016-2017 and financial reporting manipulation, it is documented that firms participate in tax amnesty programs do not engage in financial statements manipulation (Soepriyanto et al., 2019). Further analysis of the corporate tax avoidance measures shows that those firms do not engage in tax avoidance activities either. The results suggest that firms participate in the tax amnesty programs are not necessary ‘bad firms’, and they just participate as a ‘symbolic’ gesture to get some indirect benefits of the program.

Tax haven countries are the low jurisdiction countries, which offer businesses the opportunity to engage in tax avoidance. Up until now, there are roughly 45 tax haven countries, which include Ireland, Luxemburg, Singapore, Hong Kong etc. These areas are common among international investors. The attractiveness of a tax haven is it can facilitate
the avoidance of taxes, which are owed to the government. The way in which businesses can accomplish tax avoidance is by doing financial arrangements, and also because these kinds of countries have very low-quality measurements related to governance (Hines, 2013).

Tax haven countries are always in a position which give benefits internationally. The way a tax haven provides avoidance is by letting the payers allocate their taxable income to low tax jurisdictions. Another method that can be used is by applying pricing adjustments in transactions (Dharmapala & Hines, 2009). However, tax havens are recently under pressure regarding the sharing of information about deposits among cross borders. Unfortunately, it has been argued by Schejelderup that the exchange of information is costly for governments. Also, tax haven countries do not have accurate information regarding these companies (Wilson, 2014).

Tax havens have been long examined in tax literature. As tax havens refer to a very low or no-tax jurisdiction, those literature studies therefore mainly tested the impact of tax haven operations on tax payments. One of important studies examined the effects of a tax haven on U.S. multinational companies’ tax payments (Harris et al., 1993). In that research, they found a negative relation between U.S. multinational companies’ tax payments in the U.S. and the presence of foreign operations in three of the most unambiguously low-tax regions, such as the “dragon” Asian countries, Ireland, and tax haven countries. This finding may imply that U.S. multinationals use tax havens and other low-tax jurisdictions as their way to reduce U.S. tax liabilities. In a similar vein, Hines & Rice (1994) examined the income shifting activities of U.S. companies to tax havens and other low-tax countries as an effect of tax rate advantages. In this case, they discovered a negative relation between tax rates and the reported pre-tax income of U.S. companies. Specifically, a one percentage point increase of tax rates will reduce reported profits by 3 percent. Furthermore, they also found that U.S. multinationals have a higher physical operation in a jurisdiction with a lower tax rate to justify higher profits reported in those jurisdictions (Hines & Rice, 1994).

In a more recent study, Dyreng & Lindsey (2009) examined the effects of tax haven operations on tax burdens of multinationals based in the U.S. They revealed that those U.S. companies with at least one tax haven operation are approximately 1.5 percentage points lower in the worldwide tax rate on pre-tax worldwide income relative to those without tax operations in at least one tax haven country (Dyreng & Lindsey, 2009). Similarly, there was also evidence that tax haven operations decrease the effective tax rates (Markle, K.S & Shackelford, 2012). Those above studies provide evidence that tax haven operations may reduce the tax rates faced by companies. As the Panama Papers, Offshore Leaks, and Paradise Papers disclosed about the usage of tax haven operations by several companies, this study predicts that companies with tax haven operations as indicated by the Panama Papers, Offshore Leaks, and Paradise Papers will have lower effective tax rates relative to those without tax haven operations. Therefore, the first hypothesis of this study is as follows (stated in an alternative form):

**H1:** The effective tax rate of companies with tax haven operations as indicated by the Panama Papers, Offshore Leaks, and Paradise Papers is lower compared to the effective tax rate of those without tax haven operations.

Markle & Shackelford (2012) examined the role of financial constraints on corporate tax planning behavior. They found a negative relation between effective tax rates and financial constraints. It shows that companies reduce their tax payments when they face an increase in financial constraints. The results indicate that companies engage in more tax planning
strategies in order to generate higher cash tax savings as a consequence of an increase in difficulties to access external funds. Bringing those results together, if a tax haven enables companies to reduce their tax payments, then they will have higher cash holdings as an effect of higher cash tax savings. The second hypothesis of this study is therefore (stated in an alternative form):

\[ H_2: \text{The cash holdings of companies with tax haven operations as indicated by the Panama Papers, Offshore Leaks, and Paradise Papers are higher compared to the cash holdings of those without tax haven operations.} \]

Next, another interesting firm characteristic to explore is a firm’s debt level. *Ceteris paribus* means the greater the firm’s tax shields from debt is, the lower the need for incremental tax planning will be (MacKIE-MASON, 1990). Leveraged firms that use debt capital to finance their activities incur interest expenses that are deductible for tax purposes. As such, leveraged firms benefit from a tax shield, where their value increases with financial leverage. Hence, firms with high debt levels are faced with less of a need to draw on alternative non-debt tax shields to reduce taxes (Graham & Tucker, 2006). On the other hand, leverage might also signal the complexity of a firm’s financial transactions, leading to the assumption that highly leveraged firms have a greater ability to reduce taxes through the use of financing transactions (Mills, 1998). In summary, leveraged firms may either have a relatively strong incentive to avoid taxes so as to preserve cash to service the debt burden, or a relatively weak motivation to engage in tax avoidance because of debt tax shield benefits (Badertscher, Katz & Rego, 2013). Therefore, the third hypothesis of this study is as follows (stated in an alternative form):

\[ H_3: \text{The debts of companies with tax haven operations as indicated by the Panama Papers, Offshore Leaks, and Paradise Papers are lower compared to the debts of those without tax haven operations.} \]

Furthermore, regarding firm profitability, the basic premise is that more profitable firms arguably have greater incentives to reduce their tax burdens as compared to firms that are less profitable (Dunbar et al., 2010). Other study also documented evidence that more profitable firms engage in higher tax avoidance activities, including being involved in tax haven activities (Chen et al., 2010). Therefore, the fourth hypothesis of this study is formulated as follows (stated in an alternative form):

\[ H_4: \text{The profitability of companies with tax haven operations as indicated by the Panama Papers, Offshore Leaks, and Paradise Papers is higher compared to the profitability of those without tax haven operations.} \]

Finally, capital intensive firms are expected to have more tax planning opportunities (Dyreng, Hanlon & Maydew, 2008), given that capital investments often lead to book-tax differences arising from differences in tax and accounting rules (e.g., the investment tax credit, accelerated depreciation methods, and bonus depreciation). In addition, firms with high levels of property, plant, and equipment (PPE) (i.e., capital intensive firms) are commonly expected to have more tax planning opportunities (Dyreng & Lindsey, 2009) with a change in PPE being associated with cash tax benefits related to accelerated depreciation (Gallemore & Labro, 2015). As such, it is expected that firms with more capital expenditures will engage in higher tax avoidance activities, including tax haven operations. Given what prior studies have documented, we formulate the fourth hypothesis of this study as follows (stated in an alternative form):

\[ H_5: \text{The capital expenditure of companies with tax haven operations as indicated by the Panama Papers, Offshore Leaks, and Paradise Papers is higher compared to the capital expenditure of those without tax haven operations.} \]
METHOD

Below is a list of the treatment and control firms based on our matching procedures.

<table>
<thead>
<tr>
<th>No.</th>
<th>Treatment Firms</th>
<th>Control Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ASTRA GRAPHIA (PT)</td>
<td>MULTIPOlar TBK</td>
</tr>
<tr>
<td>2</td>
<td>PERUSAHAAN PERKEBUNAN LONDON SUMATERA</td>
<td>LEO INVESTMENT TBK</td>
</tr>
<tr>
<td>3</td>
<td>ASTRA INTERNATIONAL TBK</td>
<td>LIMAS INDONESIA MAKMUR TBK</td>
</tr>
<tr>
<td>4</td>
<td>Cakra MINERAL TBK (PT)</td>
<td>FORTUNE INDONESIA</td>
</tr>
<tr>
<td>5</td>
<td>CENTRIN ONLINE</td>
<td>TANAH LAUT TBK</td>
</tr>
<tr>
<td>6</td>
<td>SUGI SAMPERSADA TBK PT</td>
<td>INDORITEL MAKMUR INTL TBK</td>
</tr>
<tr>
<td>7</td>
<td>ENERGI MEGA PERSADA TBK</td>
<td>SAMINDO RESOURCES TBK</td>
</tr>
<tr>
<td>8</td>
<td>ARPeni PRATAMA OCEAN LIN</td>
<td>MULTIFILING MITRA INDONESIA</td>
</tr>
<tr>
<td>9</td>
<td>Elnusa TBK</td>
<td>STAR PACIFIC TBK</td>
</tr>
<tr>
<td>10</td>
<td>GOLDEN EAGLE ENERGY TBK</td>
<td>MULTIPOlar TECHNOLOGY (PT)</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>DYANDRA MEDIA INTL</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>CITRA MAHARLIKA NUSANTARA</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>PT ANABATIC TECHNOLOGIES TBK</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>BISI INTERNATIONAL TBK</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>ASTRA AGRO LESTARI TBK (PT)</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>MULTI AGRO GEMILANG PLANT</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>INTRACO PENTA</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>PT SIGMAGOLD INTI PERKASA</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>METRODATA ELECTRONICS TBK</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>MODERN INTERNASIONAL TBK</td>
</tr>
</tbody>
</table>

Table 1.
List of the Treatment and Control Firms

We used a modest method to see the different characteristics between firms that were involved in tax haven activities (i.e., treatment firms) and their counterparts which were not involved in tax haven operations (i.e., control firms). We matched treatment firms with control firms based on the specific characteristics such as in the same industry and similar size. In doing so, we restricted the one-to-two matching procedure, in which one treatment firm may have two control firms. We used a ten-year observation period, from 2007 to 2016, leading to 100 firm-year observations for treatment firms and 200 firm-year observations for control firms. After this matching process, we ran tests to discover the differences between treatment firms and control firms for several important variables. In addition, we also used the Wilcoxon sum rank test to test the difference in the median between the treatment and control firms.

For the data source, we used a combination of firms listed in the Indonesia Stock Exchange (IDX) and firms listed in the Offshore Leaks Database provided by the International Consortium of Investigative Journalists (ICIJ). We used publicly available data through IDX’s website: www.idx.co.id and ICIJ’s website in https://offshoreleaks.icij.org/.
RESULTS AND DISCUSSION

Having constructed the matched sample, we then compared the variable of interest of firms involved in tax haven activities (treatment sample) and firms without involvement in tax haven operations (control sample). Table 2 and Table 3 present the results of this comparison on the proxies of corporate tax avoidance, namely effective tax rates. The two measurements of the effective tax rates employed in this study are a firm’s Book Effective Tax Rate (BETR) and Cash Effective Tax Rate (CETR), both of which capture a broad range of tax avoidance activities including non-aggressive and aggressive tax minimization activities (Lietz, 2013). BETR is measured using financial statement information, reflecting the total tax expenses per dollar of pre-tax book income in year t. Lower values of BETR represent higher levels of tax avoidance. Next, we measured CETR over a one-year period and defined it as cash taxes paid in year t divided by pre-tax book income less special items in year t (Christensen et al., 2015). Dyreng et al. (2008) posited that firms which engage in effective tax planning are able to maintain lower levels of CETR. Unlike BETR, CETR is not biased by changes in tax accounting accruals. Furthermore, CETR reflects tax avoidance activities that defer cash taxes paid (i.e., temporary differences) as well as those that directly affect net income (i.e., permanent differences). Thus, CETR reflects any activity that reduces cash taxes paid in the current period, many of which may not affect net income (Dyreng et al., 2008). Consistent with prior research, lower values of CETR represent higher levels of tax avoidance.

In Table 2, the mean value of the book effective tax rate for treatment firms is 0.179, while the corresponding value for control firms is 0.246. As lower values of a book effective tax rate represent higher tax avoidance, this indicates that book effective tax rates for firms with tax haven activities, on average, are lower than book effective tax rates for firms without involvement in tax haven operations. The results from a two-sample t-test and a Wilcoxon sum rank test suggest that this difference is statistically significant at the 1 percent level (p-value = 0.001).

In Table 3, the mean value of cash effective tax rates for treatment sample firms is 0.209, while the comparable value for firms in the control sub-sample is 0.285. The results from a two-sample t-test and Wilcoxon sum rank test indicate that the difference is statistically significant at the 1 percent level (p-value = 0.007). This is keeping in mind that lower cash effective tax rates reflect higher corporate tax avoidance. Thus, these statistics suggest that the cash effective tax rates for firms involved in tax haven operations, on average, are lower than the cash effective tax rates for firms without involvement in tax haven activities. In summary, the statistics based on a matched sample show that firms involved in tax haven operations, on average, have lower book and cash effective tax rates, compared to firms without involvement in tax haven operations, which thus, supports the first hypothesis.

<table>
<thead>
<tr>
<th>Companies</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>100</td>
<td>0.179</td>
<td>0.218</td>
<td>0.167</td>
</tr>
<tr>
<td>Control</td>
<td>200</td>
<td>0.246</td>
<td>0.249</td>
<td>0.226</td>
</tr>
</tbody>
</table>

T-test difference on mean  
0.001***

Wilcoxon sum rank test  
0.001***

Table 2.
Book Effective Tax Rate
Next, Table 4 shows that the mean value of cash to assets for treatment firms is 0.136, while the corresponding value for control firms is 0.098. The results from a two-sample t-test and Wilcoxon sum rank test indicate that the difference is statistically significant at the 1 percent level (p-value = 0.007). The results indicate that companies which engage in tax haven operations have a higher cash to asset ratio compared to their counterparts. The results suggest that a tax haven enables companies to reduce their tax payments, and thus leads to higher cash holdings as an effect of higher cash savings. This result lends support to the second hypothesis.

In Table 5, we show the results for treatment firms and sample firms based on the level of debt they have. Table 5 uses leverage, defined as the ratio of the firm’s long-term debt to total assets, and is included to capture the extent of debt tax shields available to firms. The mean value of debt to assets for treatment firms is 0.214, while the corresponding value for control firms is 0.271. The results from a two-sample t-test and Wilcoxon sum rank test indicate that the difference is statistically significant at the 1 percent level (p-value = 0.009). The result indicates that firms with tax haven operations have lower leverage compared to firms without involvement in tax haven operations. Again, the results provide credence to the third hypothesis.

Table 6 shows the level of profitability measured by return on assets. We calculated the return on assets by dividing the operating income with the beginning total assets. The mean value of return on assets for treatment firms is 0.021, while the corresponding value for control firms is 0.051. The results from a two-sample t-test and a Wilcoxon sum rank test specify that the difference is statistically significant at the 1 percent level (p-value = 0.002). The results indicate that firms with involvement in tax haven operations have lower profitability compared to firms without tax haven activities. The results, however, do not support the fourth hypothesis.
Finally, Table 7 shows the level of capital expenditure for treatment and control firms. The mean value of capital expenditure for treatment firms is 0.063, while the corresponding value for control firms is 0.083. The results from a two-sample t-test and a Wilcoxon sum rank test indicate that the difference is statistically significant at the 1 percent level (p-value = 0.001). The result indicates that firms with involvement in tax haven operations, on average, have lower capital expenditure compared to firms without tax haven activities. The result of this examination, however, does not support the fifth hypothesis.

CONCLUSION

The purpose of this study was to examine Indonesian listed firms’ involvement in tax haven operations and how it relates to their corporate tax avoidance and firm characteristics. Using a combination of data from Indonesian companies listed in the Indonesia Stock Exchange and Offshore Leaks Database from 2005-2016, this study suggests that Indonesian companies with tax haven operations as documented in the offshore database have a lower Cash Effective Tax Rate (CETR) and Book Effective Tax Rate (BETR) relative to companies without involvement in tax haven activities. The results may suggest that a benefit of having tax haven operations is a reduction in tax payments. Furthermore, this study has found evidence that companies with tax haven operations as indicated in the Offshore Leaks Database have higher cash holdings compared to the counterparts that are not involved in offshore activities. In this case, those companies also have lower leverage relative to the companies without tax haven operations. Additionally, we also found that firms involved in tax haven operations have lower profitability and capital intensity compared to firms without an establishment in tax haven jurisdiction. In general, those results show that by having operations in tax havens, companies can generate higher cash tax savings to be used for their operations. The findings of this study are important to identify the characteristics attached to companies with tax haven operations and extend previous studies by providing evidence on the characteristics of firms in developing countries that engage in tax haven operations.

REFERENCES


