

Khan, Muhammad Arsalan; Nuryanah, Siti

## Article

# Combating tax aggressiveness: Evidence from Indonesia's tax amnesty program

Cogent Economics & Finance

## Provided in Cooperation with:

Taylor & Francis Group

*Suggested Citation:* Khan, Muhammad Arsalan; Nuryanah, Siti (2023) : Combating tax aggressiveness: Evidence from Indonesia's tax amnesty program, Cogent Economics & Finance, ISSN 2332-2039, Taylor & Francis, Abingdon, Vol. 11, Iss. 2, pp. 1-17, <https://doi.org/10.1080/23322039.2023.2229177>

This Version is available at:

<https://hdl.handle.net/10419/304125>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

## Combating tax aggressiveness: Evidence from Indonesia's tax amnesty program

Muhammad Arsalan Khan & Siti Nuryanah

**To cite this article:** Muhammad Arsalan Khan & Siti Nuryanah (2023) Combating tax aggressiveness: Evidence from Indonesia's tax amnesty program, Cogent Economics & Finance, 11:2, 2229177, DOI: [10.1080/23322039.2023.2229177](https://doi.org/10.1080/23322039.2023.2229177)

**To link to this article:** <https://doi.org/10.1080/23322039.2023.2229177>



© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 29 Jun 2023.



Submit your article to this journal [↗](#)



Article views: 3972



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 3 View citing articles [↗](#)



Received: 02 January 2023  
Accepted: 21 June 2023

\*Corresponding author: Siti Nuryanah,  
Department of Accounting, Faculty of  
Economic and Business, Universitas  
Indonesia, Depok, Jawa Barat 16424,  
Indonesia  
E-mail: [siti.nuryanah@ui.ac.id](mailto:siti.nuryanah@ui.ac.id)

Reviewing editor:  
Caroline Elliott, Economics,  
University of Warwick Faculty of  
Social Sciences, UK

Additional information is available at  
the end of the article

## GENERAL & APPLIED ECONOMICS | RESEARCH ARTICLE

# Combating tax aggressiveness: Evidence from Indonesia's tax amnesty program

Muhammad Arsalan Khan<sup>1</sup> and Siti Nuryanah<sup>1\*</sup>

**Abstract:** Taxation has a vital role as a domestic financial source to achieve Sustainable Development Goals (SDGs). To increase domestic revenue, combating tax avoidance is important, especially for Indonesia, one of the most populous countries with the fact that the 2020 country's tax-to-GDP ratio decreased to 10.1% in 2020 which is below the Asia and Pacific average of 19.1%. This paper examines the effect of the tax policy of Indonesia, i.e., tax amnesty and other factors on tax aggressiveness. Indonesia is taken as the case study for the specific characteristics of its tax reforms. The sample of this study consists of 402 observations from manufacturing companies listed in the Indonesian Stock Exchange (IDX) for the periods of 2013–2018. This study collected secondary data and employed a purposive sampling method for the selection of samples. Multiple regression analysis was used to examine the factors affecting tax aggressiveness. The results show that internal governance mechanisms, namely independent commissioners and institutional ownership, as well as the company's characteristics, namely leverage and profitability, have a significant effect on tax aggressiveness. This study, however, cannot find the effectiveness of tax amnesty in combatting tax aggressiveness. This study brings an implication for developing tax policies for companies in Indonesia, to reduce tax aggressiveness.

**Subjects:** Economics; Finance; Business, Management and Accounting



Siti Nuryanah

## ABOUT THE AUTHORS

Siti Nuryanah is a researcher and lecturer in Accounting and Tax at the Faculty of Economics and Business, Universitas Indonesia. She is Head of the Academic Quality Assurance Unit of the Faculty. She previously taught Accounting and Business at Victoria University and Monash University, Melbourne, Australia. She is also a consultant in accounting, business, and tax. She has received various international and national research grants. Her research spans accounting, tax, finance, governance, and sustainability. She contributes to academic literature by writing books and papers published in national and international refereed journals. Currently, she provides a short-term expert consultation to the Directorate General of Taxes, Ministry of Finance, Republic of Indonesia, for tax compliance project under the funding of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Muhammad Arsalan Khan is a highly accomplished scholar with expertise in accounting and taxation. He completed his master's degree in Accounting at Universitas Indonesia and is currently pursuing his doctoral degree in Accounting at Universitas Airlangga, Indonesia. Throughout his academic career, Mr. Khan has demonstrated exceptional skills in quantitative analysis and research methodology, particularly in the areas of accounting and taxation. He has published several research papers in reputable journals and presented his findings at various international conferences. With his strong academic background and expertise in accounting and taxation, Mr. Khan is well positioned to make significant contributions to the accounting profession and help address the challenges facing the industry today.

**Keywords:** Tax aggressiveness; tax avoidance; tax amnesty; effective tax rate; manufacturing companies

## 1. Background of the study

Sustainable development goals (SDGs) have been set to end extreme poverty and boost inclusive and sustainable growth by 2030. A massive investment in such tangible and intangible assets as infrastructure and human capital is required to facilitate the achievement of the SDGs, indeed, requires enormous financial resources. In this case, taxation as a source of domestic revenue has a key role in financing the SDGs. Strengthening and improving the effectiveness and fairness of the tax systems is important to enabling the tax collectors to effectively do their jobs and fight tax evasion and tax avoidance which in the end raises more domestic revenue to achieve the SDGs. Improving the effectiveness and fairness of the tax systems becomes more important especially for an emerging country like Indonesia, the fourth most populous country in the world with tax being the main revenue of the country (around 70%). In addition, Indonesia's tax-to-GDP ratio stood at 11% in 2018 which is the lowest amongst middle-income countries worldwide (Jakarta Post, 2018); and this ratio decreased to 10.1% in 2020 which is below the Asia and Pacific average of 19.1% (OECD, 2022). This figure suggests Indonesia's narrow tax base and Indonesia's low tax compliance (Jakarta Post, 2018).

The aim to incorporate the SDGs issues into research on tax aggressiveness is to address aggressive tax avoidance problems and achieve sustainable development goals (SDGs) (OECD, 2018; UNDP, 2020). By examining the tax contributions of companies to the countries in which they operate, it is possible to understand how these contributions support the SDGs (OECD, 2018). Tax avoidance schemes reduce tax contributions to host countries and limit the ability of governments to fund critical public goods and services, hindering progress toward the SDGs (UNCTAD, 2019). Tax aggressiveness can impede progress toward specific SDGs such as poverty alleviation (SDG 1) and sustainable infrastructure (SDG 9) (OECD, 2021; UNDP, 2020). Investigating factors such as tax policy, i.e., tax amnesty, and internal governance mechanisms such as independent commissioner and institutional ownership, and other company's characteristics such as leverage, profitability, and firm size can provide insights into the impact of tax aggressiveness on tax contributions to host countries.

Recognizing the urgency to a continuous improvement in the tax system and administration, Indonesia has recorded quite long tax reform programs over the last 50 years (Brondolo et al., 2008), the latest of which was in 2016. Claiming success for the 2016 tax amnesty, the government continues to the second part of the tax amnesty program called "a voluntary disclosure program" in 2022. Despite being a controversial revenue-raising tool of the government in combating tax evasion since its long-term impact on tax compliance is questionable, this tax amnesty program is argued to be impactful in generating immediate revenues for the government (Nuryanah & Gunawan, 2022). Therefore, this policy is quite popular around the world as at least 38 countries have implemented tax amnesties (Hermansyah, 2016).

Extending the previous study of Nuryanah and Gunawan (2022) and other tax amnesty and tax aggressiveness studies (such as Baer & Le Borgne, 2008; Bayer et al., 2015; Fadhila & Handayani, 2019; Huda & Hernoko, 2017; Ibrahim et al., 2017; Inasius et al., 2020; Safuan et al., 2022; Sayidah et al., 2019; Shevlin et al., 2017), this study focuses on 2016 Indonesia's tax amnesty which was claimed to be successful in generating short-term revenue for the country. Specifically, this paper examines the effectiveness of the policy in combating tax noncompliance especially tax avoidance which is argued to be the problem faced by the country. Tax aggressiveness, which is part of tax avoidance activities, is a strategy by company managers, which consists of practices, processes, and resources for the purpose to increase the profit after all both legal and illegal corporate liabilities owed to the government and other stakeholders (Badertscher et al., 2013; Onyali & Okafor, 2018). Taxpayers attempt to avoid the

tax due to the lack of direct benefit of tax. Hence, the taxpayers consider tax more as a burden (Ryandono et al., 2020). The companies look for loopholes to minimize the tax burden; the more loopholes that are used, the more tax savings the company will be made so the company is known to be more aggressive toward tax (Armstrong et al., 2015; Pasca et al., 2018).

The previous study found that external factors such as tax policy can influence the company's tax aggressiveness (Bayer et al., 2015). Tax amnesty as one of the tax policies is part of the tax reform agenda launched by the government to extend and intensify taxation. With the tax amnesty program, the company's efforts to avoid taxes or conduct tax aggressiveness would be closely related to tax planning, which is important to be prepared in the period of tax amnesty. Focusing on the tax amnesty program, this study also examines other factors that influence tax aggressiveness including the internal factors as found by previous literature such as leverage (Arianandini & Ramantha, 2018; Dharma & Ardiana, 2016; Lanis & Richardson, 2015; Suyono, 2018), profitability (Arianandini & Ramantha, 2018; Mohammadzadeh et al., 2013; Yazdanfar & Öhman, 2015), firm size (Leksono et al., 2019; Sriviana & Asyik, 2013), independent commissioners (Lestari et al., 2019; Suyanto & Supramono, 2012), and ownership structure (Bird & Karolyi, 2017; Bushee, 2001; Y. Chen et al., 2015; David et al., 2001; Khan et al., 2017; Kholbadalov, 2012).

Most of the previous studies only focused on factors that were more internal to the company, but only a few studies have discussed external factors such as government policies on tax aggressiveness. As a result, previous research has not been able to answer how the effect of tax reform, i.e., tax amnesty on tax aggressiveness. With this research gap, as the Indonesian government held a tax amnesty program, this study is interested in discussing how tax amnesty affects tax aggressiveness. Regarding the determinant factors discussed earlier, the current study will further confirm these determinant factors on tax aggressiveness, especially after tax amnesty.

In addition to tax amnesty as an external control mechanism, the internal governance controlling mechanism such as independent commissioners suggest that they will have greater influence to supervise management performance as well so that that management's aggressive behavior towards corporate taxes will decrease (Suyanto & Supramono, 2012). Another internal governance mechanism namely institutional investors which is usually large shareholder in the company and also have voting power can force managers to seek opportunities for self-serving behavior to improve economic performance so there is a possibility of tax aggressiveness (Shleifer & Vishney, 1986). Characteristics of a firm such as leverage which represents how many firm assets are financed by debt amount suggest high firm leverage shows an additional interest expense which minimizes the profitability of the firm that can decrease the tax cost of the firm (Suyono, 2018). Another company's characteristic, namely profitability which reflects the company's financial performance, suggests that the higher the profitability owned by the company, the greater the tendency to carry out tax aggressiveness (Hayati, 2023). This study also examines firm size as a control variable if the company size is large, the more it will be monitored by the government and this will lead to two possibilities, namely the tendency to comply (compliance) or tax aggressiveness (Leksono et al., 2019).

This study fills the gap in tax aggressiveness literature by focusing on the effect of the tax amnesty policy. The sample of this study is corporate taxpayers which are the target of the 2016 tax amnesty program, not SME taxpayers as examined by a previous Indonesian study (Inasius et al., 2020). The structure of the paper is as follows: after the introduction, previous literature is presented. Then, the third section presents the research method and data analysis. This is followed by an analysis and discussion of the results. The last section presents the conclusion and implications of the study.

## 2. Literature review and hypotheses development

### 2.1. Agency theory, tax aggressiveness, and tax amnesty

Agency theory deals with the problems and solutions associated with the responsibilities of principals to agents related to the conflicting interests between principal and agent (Jensen & Meckling, 1976). An agency relationship is a contract where the owner as principal orders the other party: the manager as an agent to perform services on behalf of the principal (owner) and provide authority or delegate to the agent (manager) to make the best decision for the principal (owner) (Nugraha & Meiranto, 2015). This agency theory is based on three human nature assumptions which are 1) humans are selfish (self-interest); 2) humans have a limited capacity to think about future perceptions (bounded rationality); and 3) humans always escape from risk (risk averse). This theory is a development of studies on how to arrange the work agreements to motivate the manager as the agent to work based on the wishes of the owner as principal. Corporate managers do not act well as agents because they can take benefits from tax aggressiveness for their benefit (Kurniawan & Nuryanah, 2017). Agency theory also implies the existence of information asymmetry between owner and manager. Manager as a part of company management knows more about internal information so that there is a gap in the information between the management and the owner. The conflict in the interests of the owner as principal and manager as an agent furthermore leads to aggressive tax avoidance behavior because, on the one hand, management wants to increase compensation through high returns, while shareholders want to minimize tax expenses through low earnings. Therefore, to bridge the agency problem, aggressive tax avoidance behavior will emerge to optimize these two interests.

There are two perspectives in assessing tax aggressiveness activities within the framework of agency problems, which are from the point of view relationship manager (agent) and the owner (principles). In the first perspective, there is an agreement between management and principals. Reducing tax payments is an activity that is beneficial to management and aims to maximize shareholder interests (Hanlon & Heitzman, 2010). The second perspective explains the differences in interests between management and company owners. This perspective is illustrated by Desai and Dharmapala (2006) by proposing a situation in which managers want to maximize their interests by avoiding corporate tax payments, and they will use company resources for personal benefit. Meanwhile, shareholders' compliance with the tax authorities aims to reduce the transfer of company resources to managers (Hanlon & Heitzman, 2010).

OECD defines tax aggressiveness strategies as tax planning that exploits gaps and violations in tax regulation to manipulate business transactions or hide the profit to pay minimal or zero tax (Nuryanah et al., 2023). The concept of tax aggressiveness is the same as tax avoidance, tax mitigation, tax planning, tax shelters, and legal and illegal tax minimization which is regulated by the taxation authorities (Armstrong et al., 2012; Badertscher et al., 2013; Ogbeide & Iyafekhe, 2018). Tax aggressiveness is the combination of tax avoidance (legal) and tax evasion (illegal). Tax avoidance is an effort by taxpayers to avoid or reduce tax amounts that need to be paid, through legal loopholes which do not mismatch laws and regulations by the state (Armstrong et al., 2015). Meanwhile, tax evasion is the act of violating tax rules, and it can be called tax fraud and criminal punishment can be enforced (Kim & Im, 2017). Tax aggressiveness can be committed by reducing taxable profit companies through systematic tax planning activities, either legally or illegally, called tax aggressiveness. Tax aggressiveness is a high-risk action because when it is unveiled, fines can be imposed, and the company's reputation will be publicly damaged. Minimal sanctions imposed for violations of tax rules, however, would more likely result in taxpayers committing violations.

Tax aggressiveness, in the context of agency theory, provides the benefit to save tax payments so that owner can be more greatly benefited through tax savings or investing the savings to fund company investments to maximize shareholder value and increase company profits in the future. For the agent, tax aggressiveness will increase the bonus from the owner for the increase in net



income due to the tax savings it does. Meanwhile, the disadvantages of corporate tax aggressiveness are the possible sanction of fine imposition and decreased share price upon the disclosure of tax aggressiveness. For the state, this tax aggressiveness taken by the company will minimize state tax revenue (Suyanto, 2012).

Turning to the context of tax amnesty, from the agency theory's point of view, the government, as a tax policymaker, acts as the principal, while the company acts as the agent with opposing interests. The government aims to increase the country's revenue by applying a tax on companies, while a company as a taxpayer attempts to decrease the tax burden through tax aggressiveness. Therefore, to minimize the agency problem, the tax amnesty program is argued as the solution to optimize these two conflicting interests because tax amnesty provides some benefits for taxpayers which in the end motivate them to pay tax liability and comply with the tax regulations.

As a highly populated country that depends highly on tax revenue for public expenditure, Indonesia has conducted tax amnesty programs several times. Some of the programs, i.e., which were held in 1964 and 1984, are argued as not successful as only gained low participation of taxpayers. While the 2008 tax amnesty is argued to be very successful as in the short term the collected revenue exceeded the target of the last 10 years of that period (Tambunan, 2015). Following this, the latest tax amnesty which was held in 2016 before the current 2022 tax amnesty, which is the subject of this study, aimed to repatriate the capital and assets deposited by taxpayers abroad to avoid taxes applied in Indonesia.

One of the prominent studies on tax amnesty argues that tax amnesty is the government's short-period program granted to a corporate taxpayer to pay a defined amount of tax (Baer & Le Borgne, 2008). In return, the corporate taxpayers would get the benefit of forgiveness of a tax liability which includes relief of interest and penalties. Tax amnesty is also often used to obtain correct data on taxpayers so that in the future it can be used as a basis for increasing law enforcement on tax compliance and extracting tax revenues (Cordes et al., 1999). However, in the long term, it is argued that honest taxpayers, after the amnesty program ends, can even be dishonest because they hope that in the future there will be another tax amnesty. Then, the provision of a tax amnesty is also feared to cause a sense of injustice to those who have been honest taxpayers. The granting of amnesty is also feared to indicate the opportunities and conveniences of committing tax aggressiveness.

Based on the discussion above, it is clear that tax amnesty would indirectly affect the existence of tax aggressiveness for taxpayers to prepare tax payment plans. While there are opposing views on tax amnesty, this study argues that in its nature, tax policy including tax amnesty is the government's tool to discipline the taxpayers to be compliant taxpayers. Therefore, in line with the previous studies specifically in Indonesia and other countries which found a positive significant effect of tax amnesty on tax aggressiveness and/or tax compliance (Bayer et al., 2015; Rahayu, 2017; Renaldi, 2017; Rusmadi, 2017), the following hypothesis is developed:

**H1:** There is a positive association between tax amnesty and tax aggressiveness.

## **2.2. The effect of leverage on tax aggressiveness**

Debt is one of the external sources of financing the companies use as an alternative to their capital structure. One proxy for firm capital structure is leverage which is a ratio that measures the extent of firm asset finance by debt. Leverage also shows the use of debt to maximize profit. However, fixed interest expense will be created in the form of debt, where the higher the debt amount the higher the interest that should be paid by a firm which shows less net profit before tax in the financial statements. In other words, it will also reduce taxable income because the greater the debt, the greater the tax incentives to the firm. In this situation,

a manager's behavior often influences to show a lot of debt in a financial statement while preparing an alternative capital structure, which will minimize the tax cost (Richardson & Lanis, 2007). Some of the previous studies indicate that there is an effect of leverage on tax aggressiveness and prove that the greater the company's leverage ratio, the lower the effective tax rate (ETR) which comes from the interest payable that minimizes the tax burden. It indicates that leverage has a positive influence on tax aggressiveness (Dharma & Ardiana, 2016; Lanis & Richardson, 2015; Wahyuni et al., 2017). Based on the discussion above, the following hypothesis is developed:

**H2:** There is a positive association between leverage and tax aggressiveness.

### **2.3. The effect of profitability on tax aggressiveness**

Profitability is the ability of the firm to make profits during a specific period. According to Gitman (2012) profitability is the ratio of revenues to costs using a company's both current and fixed management assets in productive activities. Profitability can be an indicator of the efficiency of a company (Majed et al., 2012). In addition to that, the effectiveness can be measured through the profitability ratio. Accordingly, good performance will be shown through the success of the management in generating maximum profits for the company. According to Hamilah (2020), the company's profitability can be measured using the return on assets (ROA) ratio, gross profit margin (GPM), net profit margin (NPM), return on equity (ROE), operating ratio (OPR). In this study, ROA is used to measure profitability. A high ROA indicates better performance. This means that management is increasingly effective in utilizing the company's assets to make profits.

The higher the profitability of the company, the more likely it will affect the amount of income tax expense to be paid (Adisamartha & Noviri, 2015). High profitability ensures that the firm will be able to easily pay the taxes charged, which allows the principal (the government) to gain from high profitability. Additionally, Manzon and Plesko (2001) show that there is a negative association between profitability and tax aggressiveness. Therefore, companies take advantage of tax exemptions and make more efficient use of tax deductions and credits. In line with Mohammadzadeh et al. (2013), Yazdanfar and Öhman (2015), and Gryčová and Steklá (2015) who show that profitability has a negative effect on tax aggressiveness. Based on the discussion above, the following hypothesis is developed:

**H3:** There is a negative association between profitability and tax aggressiveness.

### **2.4. The effect of independent commissioner on tax aggressiveness**

Independent commissioners can be defined as commissioners who come from outside the company and have no relationship with the internal company, either directly or indirectly. The company appoints independent commissioners to oversee how the organization within the company is run and mediates the rule-compliant strategic or policy decisions such as tax. Independent commissioners are believed to be the mediators between the two parties because they are objective and have a small risk of internal conflict (Ardyansah & Zulaikha, 2014).

The board of commissioners has a significant role in making a decision and making management policies in accordance with the wish of owners (Putra et al., 2019). Independent commissioners have quite an influential role in the company's tax payment. According to Suyanto and Supramono (2012), if independent commissioners are high, they will supervise management performance better, so that management's aggressive behavior towards corporate taxes will decrease. Independent commissioners always ensure that the company follows the laws and regulations. Thus, the company with much independent commissioner will do less tax aggressiveness. Based on the discussion above, the following hypothesis is developed:



**H4:** There is a negative association between an independent commissioner and tax aggressiveness.

### **2.5. The effect of institutional ownership on tax aggressiveness**

Institutional ownership is defined as the proportion or percentage of shares held by such financial institutions as investment companies, insurance companies, or banks (Fadhilah, 2014). Tax aggressiveness is used by a company to save money on taxes, but it can also result in penalties from the tax authority, such as implementation costs and agency costs. As a result, whether increasing institutional ownership affects tax aggressiveness remains an empirical question (S. Chen et al., 2010). Agency theory argues that the principal asks the agent to increase the company's performance and value by guaranteeing compensation to managers. The consequence is that institutional ownership entrusts managers with the task of overseeing firm operations to improve company performance. The aim is that managers obey the rules and avoid mismatches of the information in the financial statements.

According to Shleifer and Vishney (1986), institutional investors play an essential role in supervising, regulating, and persuading managers. They suggest that because of the substantial shareholdings and voting power institutional shareholders can force managers to focus on economic performance and avoid self-serving behavior. Institutional investors have an additional motivation to guarantee that the firm makes corporate decisions that maximize shareholder wealth as this is the fiduciary responsibility of the institutional owner (Grossman & Hart, 1980; Bushee, 2001; David et al., 2001). According to Y. Chen et al. (2015), Khan et al. (2017), Bird and Karolyi (2017), and Azmi and Ramadhani (2019), there is a positive relationship between institutional ownership and tax aggressiveness. Thus, this study hypothesizes that the greater the number of shares owned by the institution, the more aggressive the firm is toward tax. Based on the discussion above, the following hypothesis is developed:

**H5:** There is a positive association between institutional ownership and tax aggressiveness.

### **2.6. Research framework**

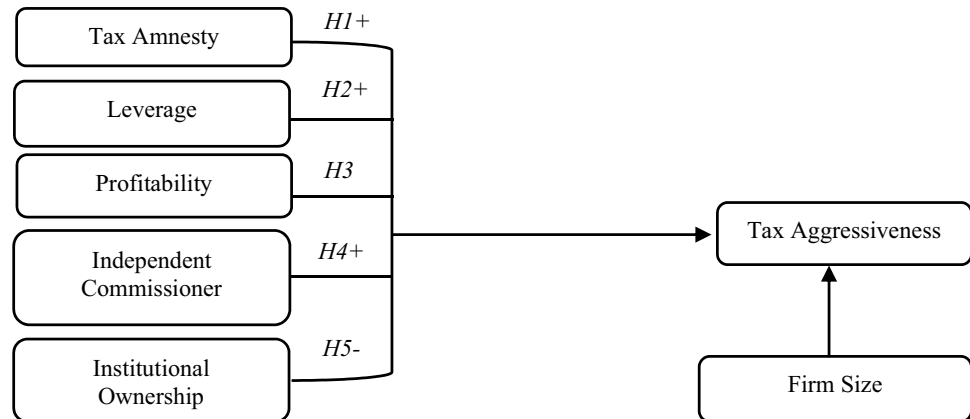
Figure 1 illustrates the relationship between independent variables (tax amnesty, profitability, leverage, independent commissioner, and institutional ownership) and the dependent variable (tax aggressiveness). According to Figure 1, this study intends to test the effect of these factors on tax aggressiveness. Based on previous literature, tax amnesty, leverage, and institutional ownership have positive associations with tax aggressiveness, while profitability and the independent commissioner have a negative association with tax aggressiveness which have been discussed in detail in the hypotheses' development. Meanwhile, firm size is used as a control variable and is measured using the natural log calculation of total assets. The larger the size of the company, the more tax aggressive they are, and vice versa (Chytis et al., 2019).

## **3. Methodology**

### **3.1. Population and sample**

The population of this research is manufacturing firms listed on the Indonesian Stock Exchange (IDX) from 2013 to 2018. The period 2013–2018 was chosen to cover the conditions before and after the implementation of the 2016 Tax Amnesty Policy. The reason for choosing the manufacturing industry is because this sector is the mainstay of the Indonesian economy which contributes greatly to national economic growth and contributes greatly to tax revenue. In Indonesia, the manufacturing sector continues to be the most important contributor to the country's economic growth. Based on the data from the Central Statistics Agency of Indonesia the manufacturing companies contributed 21.5% percent in 2015 and 21.4% in 2016 while in 2017 it reached 19.9% to total economic growth. Meanwhile, the year 2020 data show that the manufacturing sector is

**Figure 1. Research framework.**



the biggest contributor which contributes 19.88% to the total GDP of Indonesia followed by other sectors, such as agriculture, forestry, and fishing which contribute 13.7%. In the lower percentage, the sectors of wholesale and retail trade, repair of motor vehicles and motorcycles contribute 12.93%. Coming next are construction sector which contributes 10.71%, while the fifth biggest contributor is mining and quarrying which contributes 6.44% (Statista, 2021).

This study uses purposive sampling techniques to collect the data. The sampling criteria established in this study were determined as follows:

- (1) Companies that consecutively provide annual reports on the Indonesia Stock Exchange and publish audited financial reports.
- (2) The companies have not suffered a loss from 2013 to 2018. The company which suffered loss only in the individual year of the above following years because the company which suffered loss has the incentive to pay the minimum tax or even avoid tax so that it cannot be balanced with the profitable company that pays full tax (Fadhila, 2019; Ginting, 2016). The unbalanced data are also used to gather more observations. The following are the details of the sample used in this study.

### 3.2. Data analysis method

Quantitative analytic methods were utilized to analyze the data. This study uses statistical testing assisted by SPSS for quantitative analysis using multiple linear regression tests by performing the previous classical assumption test. The value of ETR is in the range of 0–1, but because ETR is a negative proxy, the value is multiplied by minus one (–1) to ease the interpretation. To measure tax amnesty, this study develops a dummy variable with coded 1 for after-tax amnesty and coded 0 for before-tax amnesty. Therefore, the years 2013 to 2015 are before the tax amnesty, while 2016 to 2018 are after the policy. For regression, this study conducted an entry method to analyze the association between independent and dependent variables. Enter (Regression) is a procedure for variable selection in which all variables in a block are entered in a single step. The model used in this study is presented in the following:

$$TA_{it} = \alpha + \beta_1 DTA_{it} + \beta_2 LEV_{it} - \beta_3 ROA_{it} - \beta_4 IC_{it} + \beta_5 IO_{it} + \beta_6 SIZE_{it} + e_{it}$$

where:

$\alpha$  = Constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$  = Regression Coefficient

TA = Tax Aggressiveness

- DTA = Dummy Tax Amnesty: 0 = Periods before Tax Amnesty (2013–2015)  
 = Periods of and after Tax Amnesty (2016–2018).
- ROA = Return on asset (profitability)
- IC = Independent Commissioner
- IO = Institutional Ownership
- SIZE = Firm Size
- E = Error

## 4. Results

### 4.1. Results of descriptive analysis

**Table 1** depicts the total observation used in this study. Based on **Table 2**, the mean leverage is 0.43, while profitability, firm size, Independent Commissioner, Institutional Ownership, and ETR are 0.11, 20.76, 0.377, 0.62, and –0.26, respectively. ETR 26.1% which is higher than the current Indonesian statutory tax rate (25%) suggests in general the sample of the study did not conduct tax aggressiveness.

### 4.2. Results of regression analysis

**Table 3** shows that the data do not exhibit multicollinearity, as indicated by a VIF value of <10 and a tolerance value of >0.05. To test for heteroscedasticity, the study used the Glejser Test, and the results showed that the sig value for each variable is >0.05, indicating the absence of heteroscedasticity. **Table 3** shows further that the variables that have a significant influence on tax aggressiveness are leverage, profitability, and independent commissioners, while tax amnesty and institutional ownership do not significantly influence tax aggressiveness. The results show that leverage is statistically significant with  $\alpha$  1% on tax aggressiveness. In this case, every increase of 1% leverage would increase the level of tax aggressiveness by 0.077. This result accepted the hypothesis and is in line with Richardson and Lanis (2007).

The results also show that profitability is statistically significant with  $\alpha$  1% on the tax aggressiveness. In this case, every increase of 1% in profitability would decrease the level of tax aggressiveness by 0.147. This result is consistent with the studies of Rani et al. (2018), Yazdanfar and Öhman (2015), Gryčová and Steklá (2015), Mohammadzadeh et al. (2013) Noor et al. (2010), and Manzon and Plesko (2001) which show that profitability has a negative significant effect on tax aggressiveness.

The third variable that has a significant effect on tax aggressiveness is the independent commissioner which is statistically significant with  $\alpha$  5%. In this case, every 1% increase in

**Table 1. Data sample**

Description	Total
Initial sample	174
Manufacturing companies (2013–2018)	
Companies with missing data	5
Companies that suffered losses in the period 2013–2018	99
Total sample	70
Outlier data	3
Final sample	67
Total observation (67 × 6 years)	402

Source: Processed Author 2021

**Table 2. Descriptive statistics**

Variable	Min	Max	Mean	Std.dev
Leverage	0.01	0.94	0.43	0.18
Profitability	0.0013	0.8849	0.1180	0.1139
Firm size	11.18	29.34	20.76	2.97
Independent commissioner	0.0	0.75	0.377	0.204
Institutional ownership	0.0	0.99	0.62	0.27
ETR (tax aggressiveness)	0.124	0.929	0.261	0.988
Observation		402		

independent commissioner would increase the level of tax aggressiveness by 0.072. This finding is consistent with Armstrong et al. (2015) who concluded that the number of independent commissioners has a positive effect on tax aggressiveness.

Finally, institutional ownership also has a significant effect on tax aggressiveness with  $\alpha$  10%. In this case, every 1% increase in institutional ownership would increase the level of tax aggressiveness by 0.026. This finding is consistent with previous studies (Azmi & Ramadhani, 2019; Bird & Karolyi, 2017; Bushee, 2001; Y. Chen et al., 2015; David et al., 2001; Grossman & Hart, 1980; Khan et al., 2017) that institutional ownership has a positive effect on tax aggressiveness.

#### 4.3. Robustness test: t-test analysis

To confirm the validity and reliability of the results obtained in this study, this study conducts a sensitivity test of the findings. In this case, the primary study examined the effect of tax amnesty on tax aggressiveness using a dummy variable before and after the amnesty period and found no significant effect. To further test the robustness of the results, a *t*-test was conducted on the data to ensure that the findings were not affected by the use of the dummy variable. The results of the *t*-test confirmed the primary study's findings, as there was still no significant effect of tax amnesty on tax aggressiveness.

Based on the results of the *t*-test in Table 4, the calculated *p*-value was found to be greater than 0.05. Therefore, it can be concluded that there is no statistically significant difference in tax aggressiveness before and after tax amnesty. This result confirms the findings of the primary study, which also found no significant effect of tax amnesty on tax aggressiveness using a dummy variable.

#### 5. Discussion

This study analyzes the effect of tax amnesty, leverage, profitability, independent commissioner, and institutional ownership on tax aggressiveness. Based on the findings of hypotheses testing in Table 3, the result is consistent with the previous studies which found that tax amnesty programs do not have any effect on tax aggressiveness because the company taxpayers may choose to take advantage of the next tax amnesty program. This is because tax amnesties do not impose penalties or disincentives for future non-compliance, and taxpayers may have viewed the program as a one-time opportunity to avoid penalties rather than a long-term commitment to tax compliance (Alm & Beck, 1993; Alm et al., 1990; Haris & Ghofur, ; Said, 2017; Torgler & Dan Schaltegger, 2005). From the agency theory's point of view, the insignificant result of the tax amnesty in this study suggests that the tax amnesty cannot be found as an effective mechanism to motivate corporate taxpayers (the agent) to comply with tax regulated by the government (the principle). In a nutshell, this study cannot find tax amnesty as an effective external governance mechanism that can control the opportunist behavior of the managers in committing tax aggressiveness.

Table 3. Regression tests						
Independent variables	Expected signs	Tax aggressiveness			Collinearity statistics	
		Unstandardized (B)	Standardized (̢)	Sig	Tolerance	VIF
Tax amnesty	+	0	-0.003	0.953	0.969	1.032
Leverage	+	0.077	0.173	0.001***	0.923	1.084
Profitability	-	-0.005	-0.166	0.001***	0.892	1.122
Independent commissioner	-	0.072	0.112	0.025**	0.947	1.057
Institutional ownership	+	0.026	0.085	0.09*	0.946	1.057
Firm size (Ln total asset)	+	-0.147	-0.025	0.616	0.929	1.076
Constant		-0.066				
R <sup>2</sup>		0.078				
Adj R <sup>2</sup>		0.064				
F		5.861				
Sig		0				

Notes: \*= significant at p < 0.1, \*\*= significant at p < 0.05, \*\*\*= significant at p < 0.01.

Table 4. t-Test								
		Paired differences					Sig (2-tailed)	
		Mean	Std. deviation	Std. error mean	95% Confidence interval of the difference			t
					Lower	Upper		
Pair 1	Before tax-after tax	0.000442	0.115516	0.008148	-0.01563	0.016509	0.054	0.957



The result of this study shows that leverage is positively significant on tax aggressiveness in manufacturing firms in Indonesia (H2 is accepted). This result is consistent with Richardson and Lanis (2007) who demonstrate that a greater leverage ratio indicates that the company is utilizing a greater quantity of money from a third party, resulting in a higher debt interest expense. If the interest expense becomes high, it will reduce the company's tax burden. The results of this study conform to the finding of previous studies which found that leverage has a significantly positive relationship to tax aggressiveness (Chytis et al., 2019; Dharma & Ardiana, 2016; Lanis & Richardson, 2015; Salaudeen & Ejeh, 2018).

Profitability shows a negative association with tax aggressiveness (H3 is accepted). The result is in line with Rani et al. (2018), Yazdanfar and Öhman (2015), Gryčová and Steklá (2015), Mohammadzadeh et al. (2013), Noor et al. (2010), and Manzon and Plesko (2001) who show that there is a negative relationship between profitability and tax aggressiveness, suggesting that companies take advantage of tax exemptions and make more efficient use of tax deductions and credits. A negative relationship between profitability and tax aggressiveness suggests further that high profitability ensures that the firm will be able to easily pay the taxes charged, which allows the principal (tax authority) to gain from high profitability.

Meanwhile, independent commissioner shows a positive significant effect on tax aggressiveness in manufacturing firms in Indonesia. While it is statistically significant, the positive sign is different from the expected sign. This result supports the study conducted by Armstrong et al. (2015) which concluded that in the Indonesian case, independent commissioners have a significantly positive effect on tax aggressiveness. In this condition, even when the number of independent commissioners is high, the company's tax aggressiveness will continue to be high. Our result is supported by Armstrong et al. (2015) who state that the selection of independent commissioners in Indonesia does not place much emphasis on competence and integrity so the supervision carried out by independent commissioners is accordingly poor. Independent commissioners usually do not understand the background and complexity of the company's business activities which causes independent commissioners to be less familiar with tax aggressiveness actions taken by company management which implies a positive relationship between independent commissioners and tax aggressiveness (Armstrong et al., 2015).

Institutional ownership is also statistically significant with  $\alpha$  10% on tax aggressiveness (H5 is accepted). The finding of this study conforms to previous studies (Azmi & Ramadhani, 2019; Bird & Karolyi, 2017; Bushee, 2001; Y. Chen et al., 2015; David et al., 2001; Grossman & Hart, 1980; Khan et al., 2016) that institutional ownership plays its fiduciary function to guarantee that the firm makes corporate decisions that maximize shareholder wealth.

## 6. Conclusions, implications, and suggestions for future research

This study aims to analyze the effect of tax amnesty, leverage, profitability, firm size, independent commissioner, and institutional ownership on tax aggressiveness. Based on the analysis, the result of this study shows that leverage, profitability, independent commissioner, and institutional ownership have a significant influence on tax aggressiveness, while tax amnesty and firm size are not found to significantly affect tax aggressiveness in manufacturing companies in Indonesia. This study brings implications for taxpayers and regulators. It is recommended that companies pay attention to every decision that will be made in accordance with applicable tax regulations, in addition to compliance with the rules. Company management also needs to carry out more incentive supervision so that tax avoidance behavior within the company can be minimized because tax aggressiveness has a risk in the future. Meanwhile, as for regulators, this research provides an overview to reduce tax aggressiveness action by companies. This study can be referred to develop policies related to tax regulations for large companies in Indonesia, to reduce tax aggressiveness by large corporations. As there is no significant association between tax amnesty and tax aggressiveness, regulators can review the long-term effect of this policy.

This research is inseparable from limitations that need to be considered for future readers and academics who want to research this topic further. This study limits its scope only to the manufacturing companies listed on the Indonesia Stock Exchange, so it does not describe all sectors listed on the stock exchanges. Therefore, future studies may fill the gap by taking samples from other sectors as well, so that the result can be more generalized. The tax aggressiveness is measured using only the ETR ratio. Future research can use other measures like CETR, GAAP ETR, discretionary permanent BTDS (DTAX), book-tax-differences BTDX, tax shelter activity, marginal tax rate, and unrecognized tax benefit. The independent variables can also be extended using different proxies for internal governance controlling mechanisms other than independency of commissioners and institutional ownership, such as diversity in the board of commissioners, and family ownership for the case of Indonesia and other East Asian countries, as it is found in this region, the company is more family-owned companies. Finally, to investigate how tax policies such as tax amnesty and tax aggressiveness affect specifically SDGs such as poverty alleviation (SDG 1) and sustainable infrastructure (SDG 9), future studies can examine more macroeconomic data such as poverty and public capital expenditure.

#### Funding

This research was funded by PUTI Q1 Universitas Indonesia (NKB-371/UN2.RST/HKP.05.00/2022)

#### Author details

Muhammad Arsalan Khan<sup>1</sup>

ORCID ID: <http://orcid.org/0000-0002-9214-1593>

Siti Nuryanah<sup>1</sup>

E-mail: [siti.nuryanah@ui.ac.id](mailto:siti.nuryanah@ui.ac.id)

ORCID ID: <http://orcid.org/0000-0002-5836-3870>

<sup>1</sup> Department of Accounting, Faculty of Economic and Business, Universitas Indonesia, Depok, Indonesia.

#### Disclosure statement

No potential conflict of interest was reported by the author(s).

#### Citation information

Cite this article as: Combating tax aggressiveness: Evidence from Indonesia's tax amnesty program, Muhammad Arsalan Khan & Siti Nuryanah, *Cogent Economics & Finance* (2023), 11: 2229177.

#### References

- Adisamartha, I. B. P. F., & Noviani, N. (2015). Pengaruh likuiditas, leverage, intensitas persediaan dan intensitas aset tetap pada tingkat agresivitas wajib pajak badan [Effect of liquidity, leverage, inventory intensity and fixed asset intensity on the level of aggressiveness of corporate tax-payers]. *E-Jurnal Akuntansi*, 13(3), 973–1000. <https://ojs.unud.ac.id/index.php/Akuntansi/article/view/14496>
- Alm, J., & Beck, W. (1993). Tax amnesties and compliance in the long run: A time series analysis. *National Tax Journal*, 46(1), 53–60. <https://doi.org/10.1086/NTJ41788996>
- Alm, J., McKee, M., & Beck, W. (1990). Amazing grace: Tax amnesties and compliance. *National Tax Journal*, 43(1), 23–37. <https://doi.org/10.1086/NTJ41788822>
- Ardyansah, D., & Zulaikha, Z. (2014). Pengaruh size, leverage, profitabilitas, capital intensity ratio dan komisaris independen terhadap Effective Tax Rate (ETR) [The effect of size, leverage, profitability, capital intensity ratio and independent commissioners on the Effective Tax Rate (ETR)]. *Diponegoro Journal of Accounting*, 3(2), 371–379. <https://ejournal3.undip.ac.id/index.php/accounting/article/view/6110>
- Arianandini, P. W., & Ramantha, I. W. (2018). Pengaruh profitabilitas, leverage, dan kepemilikan institusional pada tax avoidance [The effect of profitability, leverage, and institutional ownership on tax avoidance]. *E-Jurnal Akuntansi*, 22(3), 2088–2116. <https://doi.org/10.24843/EJA.2018.v22.i03.p17>
- Armstrong, C., Blouin, J. L., Jagolinzer, A. D., & Larcker, D. F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics*, 60(1), 1–17. <https://doi.org/10.1016/j.jaccceco.2015.02.003>
- Armstrong, C., Blouin, J., & Larcker, D. (2012). The incentives for tax planning. *Journal of Accounting and Economics*, 53(1), 391–411. <https://doi.org/10.1016/j.jaccceco.2011.04.001>
- Azmi, F., & Ramadhani, L. (2019). Factors affecting tax aggressiveness in plantation companies listed 2014–2017. *Journal of Accounting Science*, 3(1), 49–59. <https://doi.org/10.21070/jas.v3i1.2678>
- Badertscher, B., Katz, S., & Rego, S. (2013). The separation of ownership and control and corporate tax avoidance. *Journal of Accounting and Economics*, 56(2–3), 228–250. <https://doi.org/10.1016/j.jaccceco.2013.08.005>
- Baer, K., & Le Borgne, E. (2008). *Tax amnesties: Theory, trends, and some alternatives*. International Monetary Fund.
- Bayer, R. C., Oberhofer, H., & Winner, H. (2015). The occurrence of tax amnesties: Theory and evidence. *Journal of Public Economics*, 125, 70–82. Retrieved June 1, 2018 <https://doi.org/10.1016/j.jpubeco.2015.02.006>
- Bird, A., & Karolyi, S. A. (2017). Governance and taxes: Evidence from regression discontinuity (Retracted). *The Accounting Review*, 92(1), 29–50. <https://doi.org/10.2308/accr-51520>
- Brondolo, J., Bosch, F., Le Borgne, E., & Silvani, C. (2008). *Tax administration reform and fiscal adjustment: The case of Indonesia (2001–07)* (Vols. 8–129). International Monetary Fund.
- Bushee, B. J. (2001). Do institutional investors prefer near-term earnings over long-run value? *Contemporary Accounting Research*, 18(2), 207–246. <https://doi.org/10.1506/J4GU-BHWH-8HME-LE0X>
- Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*, 95(1), 41–61. <https://doi.org/10.1016/j.jfineco.2009.02.003>
- Chen, Y., Wang, S. S., Li, W., Sun, Q., & Tong, W. H. (2015). Institutional environment, firm ownership, and IPO first-day returns: Evidence from China. *Journal of Corporate Finance*, 32, 150–168. <https://doi.org/10.1016/j.jcorpfin.2015.03.002>
- Chytis, E., Tasios, S., Georgopoulos, I., & Hortis, Z. (2019). The relationship between tax avoidance, company characteristics and corporate governance: Evidence from Greece. *Corporate Ownership & Control*, 16(4), 77–86. <https://doi.org/10.22495/cocv16i4art7>

- Cordes, J. J., Ebel, R. D., & Gravelle, J. G. (1999). The encyclopedia of taxation and tax policy. *Publius-Philadelphia Then Denton TX*, 29(4), 123–123. <https://webarchive.urban.org/publications/1000539.html>
- David, P., Hitt, M. A., & Gimeno, J. (2001). The influence of activism by institutional investors on R&D. *Academy of Management Journal*, 44(1), 144–157. <https://doi.org/10.2307/3069342>
- Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, 79(1), 145–179. <https://doi.org/10.1016/j.jfineco.2005.02.002>
- Dharma, I. M. S., & Ardiana, P. A. (2016). Pengaruh leverage, intensitas aset tetap, ukuran perusahaan, dan koneksi politik terhadap tax avoidance [The effect of leverage, fixed asset intensity, company size, and political connections to tax avoidance]. *E-Jurnal Akuntansi*, 15(1), 584–613. <https://ojs.unud.ac.id/index.php/Akuntansi/article/view/17463/13432>
- Fadhilah, R. (2014). Pengaruh good corporate governance terhadap tax avoidance (Studi empiris pada perusahaan manufaktur yang terdaftar di BEI 2009-2011) [The effect of good corporate governance on tax avoidance - (Empirical study of manufacturing companies listed on the IDX 2009-2011)]. *Jurnal akuntansi*, 2(1). <https://ejournal.unp.ac.id/students/index.php/akt/article/view/908>
- Fadhila, Z. R., & Handayani, R. S. (2019). Tax amnesty effect on tax avoidance and its consequences on firm value (Empirical study on companies in Indonesia stock exchange). *Jurnal Dinamika Akuntansi*, 11(1), 34–47. <https://journal.unnes.ac.id/nju/index.php/jda/article/view/19264>
- Gitman, L. J. D. C. J. Z. (2012). *Principles of managerial finance* (13th ed. Global ed.). Pearson Education Limited.
- Grossman, S. J., & Hart, O. D. (1980). Takeover bids, the free-rider problem, and the theory of the corporation. *The Bell Journal of Economics*, 11(1), 42–64. <https://doi.org/10.2307/3003400>
- Gryčová, M., & Steklá, J. (2015). The relationship between capital structure and profitability of the limited liability companies. *Acta Universitatis Bohemiae Meridionalis*, 18(2), 32–41. <https://doi.org/10.1515/acta-2016-0003>
- Hamilah, H. (2020). The effect of commissioners, profitability, leverage, and size of the company to submission timeliness of the financial statements tax avoidance as an intervening variable. *Systematic Reviews in Pharmacy*, 11(1), 349–357. <http://www.sysrevpharm.org/?mno=85299>
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of accounting and Economics*, 50(2–3), 127–178. <https://doi.org/10.1016/j.jacceco.2010.09.002>
- Hayati, R. M. (2023). Pengaruh harga transfer, profitabilitas, dan corporate governance Terhadap Penghindaran Pajak [The effect of transfer prices, profitability, and corporate governance on tax avoidance]. *Proceedings of the National Conference on Accounting & Finance*, 5, 62–71. <https://journal.uin.ac.id/NCAF/article/view/27297>
- Hermansyah, A. (2016). The 38 countries have implemented tax amnesties: Expert. *The Jakarta Post*. <https://www.thejakartapost.com/news/2016/09/02/38-countries-have-implemented-tax-amnesties-expert.html>
- Huda, M. K., & Hernoko, A. Y. (2017). Tax amnesties in Indonesia and other countries: Opportunities and challenges. *Asian Social Science*, 13(7), 52–61. <https://doi.org/10.5539/ass.v13n7p52>
- Ibrahim, M. A., Myrna, R., Irawati, I., & Kristiadi, J. B. (2017). A systematic literature review on tax amnesty in 9 Asian countries. *International Journal of Economics and Financial Issues*, 7(3), 220–225. <https://dergipark.org.tr/en/pub/ijefi/issue/32021/354229>
- Inasius, F., Darijanto, G., Gani, E., & Soepriyanto, G. (2020). Tax compliance after the implementation of tax amnesty in Indonesia. *SAGE Open*, 10(4). <https://doi.org/10.1177/2158244020968793>
- Jakarta Post, (2018, October 11). The Indonesia's low tax-to-GDP ratio. *The Jakarta Post*. <https://www.thejakartapost.com/academia/2018/10/11/indonesias-low-tax-to-gdp-ratio.html>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Khan, M., Srinivasan, S., & Tan, L. (2017). Institutional ownership and corporate tax avoidance: New evidence. *The Accounting Review*, 92(2), 101–122. <https://doi.org/10.2308/accr-51529>
- Kholbadalov, U. (2012). The relationship of corporate tax avoidance, cost of debt and institutional ownership: Evidence from Malaysia. *Atlantic Review of Economics: Revista Atlántica de Economía*, 2(1), 7–36. <https://dialnet.unirioja.es/servlet/articulo?codigo=4744162>
- Kim, J. H., & Im, C. C. (2017). The study on the effect and determinants of small-and medium-sized entities conducting tax avoidance. *Journal of Applied Business Research (JABR)*, 33(2), 375–390. <https://doi.org/10.19030/jabr.v33i2.9911>
- Kurniawan, M. I., & Nuryanah, S. (2017). The effect of corporate tax avoidance on the level of corporate cash holdings: Evidence from Indonesian public listed companies. *Australasian Accounting Business & Finance Journal*, 11(4), 38–52. <https://doi.org/10.14453/aabfj.v11i4.4>
- Lanis, R., & Richardson, G. (2015). Is corporate social responsibility performance associated with tax avoidance? *Journal of Business Ethics*, 127(2), 439–457. <https://doi.org/10.1007/s10551-014-2052-8>
- Leksono, A. W., Albertus, S. S., & Vhalery, R. (2019). Pengaruh ukuran perusahaan dan profitabilitas terhadap agresivitas pajak pada perusahaan manufaktur yang listing di BEI periode tahun 2013–2017 [The effect of company size and profitability on tax aggressiveness in manufacturing companies listed on the IDX for the 2013–2017]. *JABE (Journal of Applied Business and Economic)*, 5(4), 301–314. <https://doi.org/10.30998/jabe.v5i4.4174>
- Lestari, D. G., Nuryanah, S., & Islam, S. (2019). Bankruptcy risk, board of commissioners' independence, and tax avoidance: An empirical study on non-manufacturing public companies. *Proceedings of the 33rd International Business Information Management Association Conference, IBIMA 2019: Education Excellence and Innovation Management through Vision 2020, Granada, Spain*. International Business Information Management Association (IBIMA), <https://ibima.org/accepted-paper/bankruptcy-risk-board-of-commissioners-independence-and-tax-avoidance-an-empirical-study-on-non-manufacturing-public-companies/>
- Majed, A. M. K., Said, M. A. A., & Firas, N. D. (2012). The relationship between the ROA, ROE and ROI ratios with Jordanian insurance public companies market share prices. *International Journal of Humanities and*

- Social Sciences*, 2(11), 115–116. <http://ijhssnet.com/journal/index/1029>
- Manzon, G. B., Jr., & Plesko, G. A. (2001). The relation between financial and tax reporting measures of income. *SSRN Electronic Journal*, 55, 175. <https://doi.org/10.2139/ssrn.264112>
- Mohammadzadeh, M., Rahimi, F., Rahimi, F., Aarabi, S., & Salamzadeh, J. (2013). The effect of capital structure on the profitability of pharmaceutical companies the case of Iran. *Iranian Journal of Pharmaceutical Research*, 12(3), 573–577. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3813274/>
- Noor, R. M., Fadzillah, N. S. M., & Mastuki, N. A. (2010). Corporate tax planning: A study on corporate effective tax rates of Malaysian listed companies. *International Journal of Trade, Economics and Finance*, 1(2), 189–193. <https://doi.org/10.7763/IJTEF.2010.V1.34>
- Nugraha, N. B., & Meiranto, W. (2015). Pengaruh corporate social responsibility, ukuran perusahaan, profitabilitas, leverage dan capital intensity terhadap agresivitas pajak (Studi empiris pada perusahaan non keuangan yang terdaftar di Bursa Efek Indonesia 2012–2013) [The effect of corporate social responsibility, company size, profitability, leverage and capital intensity on tax aggressiveness (Empirical study of non-financial companies listed on the Indonesia Stock Exchange: Periods of 2012–2013)]. *Diponegoro Journal of Accounting*, 4(4), 564–577. <https://ejournal3.undip.ac.id/index.php/accounting/article/view/9672>
- Nuryanah, S., & Gunawan, G. (2022). Tax amnesty and taxpayers' noncompliant behaviour: Evidence from Indonesia. *Cogent Business & Management*, 9(1), 2111844. <https://doi.org/10.1080/23311975.2022.2111844>
- Nuryanah, S., Mahabbatussalma, F., & Satrio, A. A. (2023). Evaluation of government reform in tax administration: Evidence from micro, small and medium enterprises (MSMEs) in Indonesia. *International Journal of Public Administration*, 46(5), 313–325. <https://doi.org/10.1080/01900692.2021.1995746>
- OECD. (2018). *Countries must strengthen tax systems to meet Sustainable Development Goals*. <https://www.oecd.org/tax/countries-must-strengthen-tax-systems-to-meet-sustainable-development-goals.htm>
- OECD. (2021). *Addressing the tax challenges of the digitalisation of the economy*. <https://www.oecd.org/tax/beps/public-consultation-document-addressing-the-tax-challenges-of-the-digitalisation-of-the-economy.pdf>
- OECD, 2022, *Revenue Statistics in Asia and the Pacific 2022 - Indonesia*. <https://www.oecd.org/tax/tax-policy/revenue-statistics-asia-and-pacific-indonesia.pdf>
- Onyali, C. I., & Okafor, T. G. (2018). Effect of corporate governance mechanisms on tax aggressiveness of quoted manufacturing firms on the Nigerian stock exchange. *Asian Journal of Economics, Business and Accounting*, 8(1), 1–20. <https://doi.org/10.9734/AJEBA/2018/38594>
- Pasca, D. P., Dedy, H. S., & Tuti, H. (2018). Tax avoidance: Evidence of as a proof of agency theory and tax planning. *International Journal of Research and Review (IJRR)*, 5(9), 52–60. [https://www.ijrrjournal.com/IJRR\\_Vol.5\\_Issue.9\\_Sep2018/Abstract\\_IJRR008.html](https://www.ijrrjournal.com/IJRR_Vol.5_Issue.9_Sep2018/Abstract_IJRR008.html)
- Putra, B. S., Nuryanah, S., & Islam, S. M. (2019). Bankruptcy risk, board of commissioners' effectiveness, and tax avoidance. *Proceedings of the 33rd International Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020, IBIMA 2019*, Granada, Spain (pp. 9307–9318). International Business Information Management Association, IBIMA. <https://ibima.org/accepted-paper/bankruptcy-risk-board-of-commissioners-effectiveness-and-tax-avoidance/>
- Rahayu, N. (2017). Pengaruh pengetahuan perpajakan, ketegasan sanksi pajak, dan Tax amnesty terhadap kepatuhan wajib pajak [The influence of tax knowledge, strictness of tax sanctions, and tax amnesty on taxpayer compliance]. *Akuntansi Dewantara*, 1(1), 15–30. <https://jurnal.ustjogja.ac.id/index.php/akuntansidewantara/article/view/21>
- Rani, S., Susetyo, D., & Fuadah, L. L. (2018). The effects of the corporate's characteristics on tax avoidance moderated by earnings management (Indonesian evidence). *Journal of Accounting, Finance & Auditing Studies*, 4(3), 149–169. <https://www.um.edu.my/library/oar/handle/123456789/32383>
- Renaldi, R. (2017). *Pengaruh Profitabilitas Terhadap Nilai Perusahaan pada Perusahaan Manufaktur Sektor Logam dan Sejenisnya yang Terdaftar di Bursa Efek Indonesia Tahun 2012–2015* [The Effect of Profitability on Firm Value in Metal and Similar Sector Manufacturing Companies Listed on the Indonesia Stock Exchange in 2012–2015] [Doctoral dissertation]. Universitas Widyatama. <https://repository.widyatama.ac.id/items/ca1f45ee-f9c4-4e41-8abc-2716cf2f3000>
- Richardson, G., & Lanis, R. (2007). Determinants of the variability in corporate effective tax rates and tax reform: Evidence from Australia. *Journal of Accounting and Public Policy*, 26(6), 689–704. <https://doi.org/10.1016/j.jaccpubpol.2007.10.003>
- Rusmadi, R. (2017). Pengaruh tax amnesty dan sanksi pajak terhadap kepatuhan wajib pajak [The effect of tax amnesty and tax sanctions on taxpayer compliance]. *Jurnal Ilmiah Indonesia*, 2(3), 124–133. <https://garuda.kemdikbud.go.id/documents/detail/2083232>
- Ryandono, M. N. H., Ernayani, R., Atmojo, P., Susilowati, D., & Indriastuty, N. (2020). Factors influencing tax avoidance in Indonesia. *Humanities & Social Sciences Reviews*, 8(1), 366–372. <https://doi.org/10.18510/hssr.2020.8147>
- Safuan, S., Habibullah, M. S., & Sugandi, E. A. (2022). Eradicating tax evasion in Indonesia through financial sector development. *Cogent Economics & Finance*, 10(1), 2114167. <https://doi.org/10.1080/23322039.2022.2114167>
- Said, E. W. (2017). Tax policy in action: 2016 tax amnesty experience of the Republic of Indonesia. *Laws*, 6(4), 16. <https://doi.org/10.3390/laws6040016>
- Salaudeen, Y. M., & Ejeh, B. U. (2018). Equity ownership structure and corporate tax aggressiveness: The Nigerian context. *Research Journal of Business and Management*, 5(2), 90–99. <https://doi.org/10.17261/Pressacademia.2018.828>
- Sayidah, N., Assagaf, A., & Ntim, C. G. (2019). Tax amnesty from the perspective of tax official. *Cogent Business & Management*, 6(1), 1659909. <https://doi.org/10.1080/23311975.2019.1659909>
- Shevlin, T., Thornock, J., & Williams, B. (2017). An examination of firms' responses to tax forgiveness. *Review of Accounting Studies*, 22(2), 577–607. <https://doi.org/10.1007/s11142-017-9390-6>
- Shleifer, A., & Vishney, R. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94(3, Part 1), 461–488. <https://doi.org/10.1086/261385>
- Sriviana, E., & Asyik, N. F. (2013). Pengaruh Pengungkapan corporate social responsibility dan ukuran perusahaan terhadap profitabilitas [The effect of disclosure of corporate social responsibility and company size on profitability]. *Jurnal Ilmu dan Riset Akuntansi*, 2(4), 2–16. <https://garuda.kemdikbud.go.id/documents/detail/523923>

- Statista. (2021, June 16). *Contribution to gross domestic product of Indonesia in 2020, by industry*. Statista Research Department. <https://www.statista.com/statistics/1019099/indonesia-gdp-contribution-by-industry/>
- Suyanto, K. D., & Supramono, S. (2012). Likuiditas, leverage, komisaris independen, dan manajemen laba terhadap agresivitas pajak perusahaan [Liquidity, leverage, independent commissioner, and profit management on corporate tax aggressiveness]. *Jurnal Keuangan dan Perbankan*, 16(2)(<https://www.jurnal.unmer.ac.id/index.php/jkdp/article/view/1057>).
- Suyono, E. (2018). External auditors' quality, leverage, and tax aggressiveness: Empirical evidence from the Indonesian Stock Exchange. *Media Ekonomi Dan Manajemen*, 33(2). <https://doi.org/10.24856/mem.v33i2.711>
- Tambunan, R. (2015, April 22). Mengupas sunset policy & tax amnesty, Senjata Kejar Target Pajak [Examining sunset policy and tax amnesty, tools to pursue tax targets]. *Liputan*, 6. <https://www.liputan6.com/bisnis/read/2217599/mengupas-sunset-policy-amp-tax-amnesty-senjata-kejar-target-pajak>
- Torgler, B., & Dan Schaltegger, C. A. (2005). Tax amnesties and political participation. *Public Finance Review*, 33(3), 403–431. <https://doi.org/10.1177/1091142105275438>
- UNCTAD. (2019). *World investment report 2019*. [https://unctad.org/system/files/official-document/wir2019\\_en.pdf](https://unctad.org/system/files/official-document/wir2019_en.pdf)
- UNDP. (2020). *Taxation and sustainable development goals*. <https://www.un.org/development/desa/financing/what-we-do/ECOSOC/tax-committee/thematic-areas/taxation-and-sdgs>
- Wahyuni, L., Fahada, R., & Atmaja, B. (2017). The effect of business strategy, leverage, profitability and sales growth on tax avoidance. *Indonesian Management and Accounting Research*, 16(2), 66–80. <https://doi.org/10.25105/imar.v16i2.4686>
- Yazdanfar, D., & Öhman, P. (2015). Debt financing and firm performance: An empirical study based on Swedish data. *The Journal of Risk Finance*, 16(1), 102–118. <https://doi.org/10.1108/JRF-06-2014-0085>