

# A CONCEPTUAL REVIEW OF EFFECTIVE TAX RATE

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**ABSTRACT:** *This study reviews the literature of effective tax rate model as this effective tax rate is commonly used as the measurement for corporate tax planning. Although the study in this area is massive, usually focused on large companies, there is no mutual understanding among the researchers on the major determinants of the corporate effective tax rate. A long list of factors to include firm size, profitability, leverage, capital intensity, inventory intensity is seen as among the most influential factors that determine the effective tax rate. From the analysis of the literature review conducted, we believed that there is a need to propose a new framework that can be used to standardize the determinants of effective tax rate and further assist the company in planning and minimize their tax burden without distorting the government revenue collection. In addition to that, this paper adds to the new insight by extending the discussion to include ethnicity which considers unique in the Malaysian setting.*

**Keywords:** Effective tax rate, Firm size, Profitability, Leverage, Capital intensity, Inventory intensity

## 1. INTRODUCTION

Effective tax rate (ETR) has received considerable attention in Western and emerging countries for decades. It was considered as the best measurement used for studies in tax planning, aggressive tax planning, and tax avoidance [1] depending on the objectives of the study undertaken. The analysis of the ETR is significant to both tax policymakers and accounting researchers [2] in order to know the effectiveness of tax policy implemented by the government. The ETR calculated based on financial statements shows how the companies involved in tax planning activities [3]. There are long lists of tax planning definitions available based on previous studies. For instance, [4] defines tax planning as an activity and procedure used by the organization, business, or individual to reduce the tax paid on their chargeable income, while [5] describes tax planning as tax payer's capability of financial information arrangement in minimizing tax burden. The effectiveness of the tax planning strategy taken by companies can reduce the companies' ETR below its standard tax rate (STR) [6]. Consequently, the activities of tax planning involved by companies can lead the companies to be an aggressive tax planner or less aggressive tax planner. Tax aggressiveness [7] is the strategy used by companies to manage their taxable income through tax-planning activities which include legal tax-planning activities, activities that may fall into a grey area, and illegal activities. Differences between STR and ETR indicate the aggressive tax planning level undertaken by each company [3]. These differences also considered as a sign for the companies to reduce their tax [8]. It can be generalized that the factors that did influence ETR are related to corporate characteristics. Corporate characteristics were suggested to be an important factor in determining the tax aggressiveness [9][10]. For instance firm size, return on assets, leverage, capital intensity and inventory intensity create variation in ETR across companies [1, 11, [12, 13, 14, 15, 16]. These characteristics were found to influence the reduction of companies' tax liability [10]. Managers are a person who is responsible for reducing the cost of companies' tax through their understanding of any loopholes in the existing tax system [10]. Therefore, it is

important to determine the most influential factors on ETR among companies. Realizing this, this paper aims to propose a conceptual framework of ETR for small and medium-sized companies in Malaysia as previous studies mostly focus on large companies. This study hopes may provide new avenue on the discussion pertaining to tax planning by reviewing and understanding some of the characteristics which influence corporate tax planning specifically for small and medium-sized companies. This study is different from the previous studies in two aspects, firstly, the inclusion of ethnicity as a new variable in this framework which considers unique in Malaysia environment and secondly, the different size of companies used as a sample may hope to provide new findings. This paper is organized into four sections. Section two discusses the relevant literature on ETR and its contributing factors. Section three highlighted the proposed conceptual framework. Section four concludes and provides a recommendation for future research

## 2. RELATED REVIEW

Corporate characteristics are important variables in investigating corporate tax behavior [9]. The variables such as firm size, profitability, capital intensity, inventory intensity, leverage, labor intensity, and auditor type have been used extensively by previous researchers [4, 11, 17, 18 19, 20] to investigate its relationship with tax planning. However, the results were mixed across studies. A study on the determinants of ETR can provide benefits to the investors, managers as well as shareholders because it will help companies in determining their tax savings [21]. However, the relationship of corporate-specific characteristics on ETR has caught many researcher's attention due to no consensus has been reached about the signs of the determinants [4, 22, 23] as this is crucial to the companies to ensure the effectiveness of such planning.

### A. Company Size and ETR

Size is one of the important variables studied in the literature as the majority of past studies utilize size as one of the indicators that affect ETR [24]. Although widely used, previous studies found a conflicting result on the sign of the relationship between size and ETR. Some researchers found a

positive relationship [25-30] while others found a negative relationship [11, 12, 14, 31]. Based on the aforementioned studies, the diversity of companies' size will affect the company's effective tax burdens [16]. The differences between this relationship were believed due to the political cost theory and political power theory [23, 32]. The political cost theory suggests that company ETR will be higher if the size of the company is larger. Larger and profitable companies with higher ETR was found by [24]. It is believed that the higher level of ETR will be identified if the aggressive company tries to protect its reputation by not engaging in tax avoidance. It is in the case of large and profitable companies where there are more adhere to the regulatory requirement due to their action are more transparent as compared to small companies [16]. Thus, this situation makes them suffer from government regulations. In contrast, the political power theory argues that large firms have lower ETR because they utilize a huge and important number of resources and manipulate the political process. This is accomplished by engaging in tax planning processes and organization of activities in order to achieve optimal tax economies [13].

A study by [11] found that a company that has political power and connection with the government will have a lower ETR. This is because large companies try to prevent their reputation by not engaging in tax avoidance, thus resulted in the negative relationship between size and ETR. However, large companies would be involved in more activities than small companies which makes them more visible and tend to disclose more information than small companies. Furthermore, studies have found that ETR also depends on the threshold. Once the size of the company exceeds a certain threshold, the relationship will turn from positive to negative, thus reflecting that larger firms have a greater effort to devote tax planning [23, 33]. However, for small companies, the complexity of the tax system may hedge them to comply which resulted in differences between size and ETR [33].

#### B. Profitability and ETR

Profitability represents the performance of the companies [34] and among the pivotal factors in ETR determinants. Similar with size, the relationship between profitability and ETR in different countries also shows a mixed result. For example, studies in Spanish, Portuguese, Korea, China, and the US found a positive relationship between profitability and ETR [20, 23, 35]. On the other hand, a study conducted in Indonesia and Malaysia found a negative relationship between profitability and ETR [11, 2, 18, 36]. In Malaysia, the negative relationship between profitability and ETR was found by [11] which conducted their study by using annual reports of public listed companies from 1990 to 1999 where the tax rate during this period is 30%. Similar to studied by [30], they also found a negative relationship when investigating the relationship between profitability and ETR due to the efficiency and profitability of the companies during that period. The negative relationship also found by [37], where higher profitable companies may have many resources and fully utilize their incentives to engage in tax planning activities.

However, the positive relationship also found between profitability and ETR in Malaysian companies [38]. Their

study used a sample of 391 SME in manufacturing, services, and agriculture sectors in the year 2000 until 2010 by utilizing ROA as profitability measurement. It can be concluded that high profitable SMEs, usually pay more tax, indicated the lack of knowledge in tax planning activities as compared to large companies. Nevertheless, the result of this study is consistent with other studies outside of Malaysia [20] [23]. However, a study in Turkey found that profitability is not significant determinants of ETR [39].

#### C. Leverage and ETR

In Malaysia, almost 72.8% of SMEs finance their business operations through internally generated funds, personal savings, or from shareholders [40]. However, companies must decide the choice of capital structure, whether they want to use debt financing, equity financing, or both as this will influence the level of ETR in the companies [41]. Companies that choose equity financing will not get a tax deduction on dividend payment as compared to companies that choose debt financing since interest expense is tax-deductible [24]. Adding to this, a study by [42] argued that it was uncertain whether leverage would necessarily decrease ETR because interest expense will decrease income for both tax and financial reporting purposes.

Nevertheless, most of the prior studies affirmed that leverage has a relationship with ETR [23, 28]. A study by [28] in Japan using a sample of a listed company from 2012 to 2015 found a negative relationship where the higher the companies' debt the lower the level of ETR in those companies. This finding supports the prior literature such as [23, 24, 31]. In Malaysia, [38] which uses the sample of SME companies found a negative relationship between leverage and ETR which indicated that leverage can help small companies reducing their tax burden. For studies within Brazil, Russia, India, and China (BRIC) context, only India shows a positive relationship while other countries support the negative association between leverage and ETR [32]. The positive relationship found between leverage and ETR in India was due to the low-interest rate imposed in the country. Although companies in India used debt financing to reduce their tax burden, they still have to bear a higher tax burden due to the low-interest rate. This finding is consistent with [14]. Nevertheless, some studies found an insignificant relationship between leverage and ETR [27][43].

#### D. Capital Intensity and ETR

In calculating accounting income, the depreciation will be deducted as an expense during the particular period until the non-current assets are obsolete or the useful life of the assets is expired. However, in calculating taxable income, accounting depreciation is a non-allowable expense. Nevertheless, the tax depreciation which is known as the capital allowance is deductible. This capital allowance is a deduction of the amount spent by the business on the acquisition of property, plant, and equipment (PPE). Companies that have a large amount of PPE will benefit from the deduction of capital allowance where the amount of capital allowance will help to reduce the level of companies ETR. In Malaysia, the negative relationship was found between capital intensity and ETR [3, 29 38]. A study by [38]

found that companies that have a large amount of PPE reported a lower ETR.

Likewise, a study by [3] which examines ETR among public listed companies in Malaysia from 2001 to 2012 and adopted a pooled OLS regression method also found that capital intensity has a negative relationship with ETR. This relationship indicates that the higher the company's investment in PPE, the more capital allowance companies can get, thus, reducing companies' ETR which supporting the finding from previous literature [1][12]. Similarly, [20] also found a negative relationship between capital intensity and ETR which lower the level of ETR for companies. On the other hand, a study by [43] found a positive relationship between capital intensity and ETR although many assets in the companies can lower ETR due to the tax breaks offered from the asset ownership. They conclude that the positive relationship is because of the inability and lack of knowledge by the companies' manager in using tax deductions related to assets. This positive relationship is consistent with [39] in Turkey where he found that companies get more capital incentives to benefit from other tax policies than the deduction of capital allowance. Moreover, [37] found that companies are not fully utilizing their tax saving from the use of tangible assets thus resulted in a positive relationship.

**E. Inventory Intensity and ETR**

[44] define inventory as "assets held for sale in the ordinary course of business; in the process of production for such sale; or in the form of materials or supplies to be consumed in the production process or in the rendering of services". It can be recognized as the investment made by the company on the inventory level. As capital intensity, inventory intensity also has a relationship with tax planning. However, past studies

found conflicting results on the relationship between inventory intensity and tax planning. For instance, a positive relationship was found by many previous researchers such as [1, 14, 18, 20]. For example, a study by [20] on 123 listed companies on Nigerian Stock Exchange from 2010 to 2014 found a positive result although they used different measurements for ETR in determining the relationship of inventory intensity and ETR.

Similarly, [24] also found a positive relationship between these two variables when they investigate 704 non-financial firms listed on the London stock exchange in 2010 to 2013. Although utilizing two measurements of ETR, the study maintains the result of a positive relationship between inventory intensity and ETR. Such results were found due to the fact that inventory in the business did not have any fiscal deductions, consistent with findings by [43]. However, further justifications were required when the result of the relationship became negative [21, 31, 45]. In Greece, [31] found that inventory intensity has a negative relationship with ETR during the financial crises. While in Indonesia the result also similar where [21] found a negative relationship between inventory intensity and ETR for 45 companies listed in the LQ-45 index from 2009 till 2014. The chosen sample which has high liquidity shares and market capitalization indicated that the higher the investment in inventory, the lower the ETR. Furthermore, [45] found that Romanian companies that invest more in inventory faced a lower tax burden compared to a company that invests less in inventory. However, consistent with [12], a study by [37] found an insignificant result between inventory intensity and ETR. Table 1 summarizes some of the findings from previous studies.

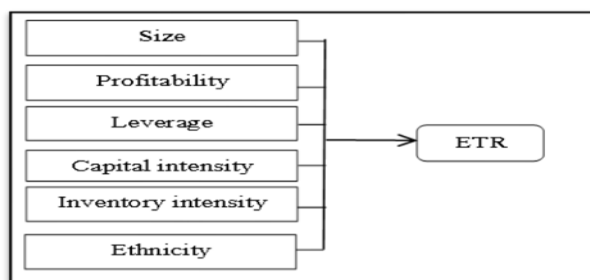
**Table 1: Summary of findings from previous studies**

No	Author	Year	Size	Profitability	Leverage	Capital intensity	Inventory intensity
1	Kim & Limpaphayom	1998	+/-				
2	Derashid & Zhang	2003	-	-	-	-	NS
3	Adhikari et al.,	2006	-	-	-	-	NS
4	Richardson & Lanis	2007	-	+		-	+
5	Noor et al.	2008	+	-	-	-	NS
6	Noor et al.	2010	+	-	-	-	+
7	Chen, Chen, Cheng, Shevlin	2010	-	+	-	-	
8	Minnick & Noga	2010	+		NS		
9	Wu et al.	2012	+/-				
10	Hsieh	2012	-	+	+	-	+
11	Delgado et al	2014	+	+	+/-	+	+
12	Fernández-Rodríguez and Martínez-Arias	2014	+/-	+/-	+/-	+/-	+/-
13	Kraft	2014	+				
14	Rashid et al.	2015		-	-	-	-
15	Ribeiro et al.	2015	+		-		+
16	Hadjidema & Eleftheriou	2016	+	+	-	-	-
17	Mascagni & Mengistu	2016	+/-		-	-	
18	Parisi	2016	+	-	+	+	+
19	Pratama	2017	+	-	NS		
20	Kim & Im	2017	-	+	+	+	
21	Moreno-Rojas et al.	2017	+/-	+	-		
22	Nomura	2017	+		-		
23	Savitri	2017	-	-	+	-	-
24	Wahab et al.	2017	-		+		

No	Author	Year	Size	Profitability	Leverage	Capital intensity	Inventory intensity
25	Mascagni & Mengistu	2018	+/-		-	-	
26	Vintilă, Gherghina, and Păunescu	2018	+	+	NS	+	+
27	Yinka & Uchenna	2018	+	+	-	-	+
28	Hazir	2019	+	NS	-	+	NS
29	Kasim & Saad	2019	+	-	-	+	

### 3. RESULTS AND DISCUSSION

There are limited studies that investigate the relationship between ethnicity and tax planning. [7] found that culture has a relationship with aggressive tax planning in a large company. In this study, ethnicity was introduced to see whether it can influence the ETR in a small and medium-size company. Thus, this study proposes the conceptual model between size, profitability, leverage, capital intensity, inventory intensity, ethnicity, and ETR as shown in Figure 1.



**Fig 1: Proposed Conceptual Framework**

### 4. CONCLUSIONS

This study attempts to review studies related to the relationship between size, profitability, leverage, capital intensity, and inventory intensity with ETR in order to have a deeper understanding of the prominent factors that influence ETR. From this review, we proposed a conceptual framework by including ethnicity as depicted in Figure 3 by highlighted all variables used from previous studies which produce a mixed result in this study area. It is hoped that by using this framework, researchers can use the analysis to investigate the most influential factor on ETR especially in small and medium-sized companies. We also hope that this study will assist companies in planning their tax wisely to reduce the burden in a legal manner. In fact, we believed that companies should not focus on the sole strategy in planning their tax where they should be diversified based on the factors listed in this study. We also hope that the result of this study might be useful for other countries in determining tax planning strategies used by small and medium-sized companies.

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### 6. REFERENCE

- [1] Richardson, G., & Lanis, R. (2007). Determinants of the variability in corporate effective tax rates and tax reform: Evidence from Australia, 26, 689–704. <https://doi.org/10.1016/j.jaccpubpol.2007.10.003>
- [2] Cao, J. (2012). Empirical Evidence on Explicit and Implicit Corporate Tax Burdens for Public Listed Companies in the People's Republic of China.
- [3] Rashid, N. M. N., Noor, R. M., & Mastuki, N. A. (2015). Longitudinal Study of Corporate Tax Planning: Analysis on Companies' Tax Expense and Financial Ratios. *Pertanika Journal of Social Sciences & Humanities*, 23(S), 109–120.
- [4] Mgammal, M. H. (2015). The Effect of Tax Planning and Corporate Governance on Tax Disclosure in Malaysia. *Universiti Utara Malaysia*.
- [5] Hoffman Jr., W. H. (1961). The Theory of Tax Planning. *Accounting Review*, 36(2), 274–284. [https://doi.org/10.1163/\\_q3\\_SIM\\_00374](https://doi.org/10.1163/_q3_SIM_00374)
- [6] Appolos, N. N., & Kwarbai, J. D. (2016). Tax Planning and Firm Value: Empirical Evidence from Nigerian Consumer Goods Industrial Sector. *Research Journal of Finance and Accounting*, 7(12), 172–183.
- [7] Wahab, E. A. A., Ariff, A. M., Marzuki, M. M., & Sanusi, Z. M. (2017). Political connections, corporate governance, and tax aggressiveness in Malaysia. *Asian Review of Accounting*, 25(3), 424–451. <https://doi.org/10.1108/ARA-05-2016-0053>
- [8] Drake, K., Hamilton, R., & Lusch, S. J. (2019). Are declining effective tax rates indicative of tax avoidance? Insight from effective tax rate reconciliations. Retrieved from <https://ssrn.com/abstract=2974219>
- [9] Devi, M. N., Salim, A. S. A., & Pheng, L. K. (2018). The Impact of Firm Characteristics on Corporate Tax Aggressiveness: A Study on Malaysian Public Listed Companies. *Advanced Science Letters*, 24(4), 2208–2212. <https://doi.org/https://doi.org/10.1166/asl.2018.10918>
- [10] Ogbeide, S. O. (2017). Firm Characteristics and Tax Aggressiveness of Listed Firms in Nigeria: Empirical Evidence. *International Journal of Academic Research in Public Policy and Governance*, 4(1), 556–569. <https://doi.org/10.6007/IJARPPG/v4-i1/562>
- [11] Adhikari, A., Derashid, C., & Zhang, H. (2006). Public policy, political connections, and effective tax rates: Longitudinal evidence from Malaysia. *Journal of Accounting and Public Policy*, 25(5), 574–595. <https://doi.org/10.1016/j.jaccpubpol.2006.07.001>
- [12] Derashid, C., & Zhang, H. (2003). Effective tax rates and the “industrial policy” hypothesis: Evidence from Malaysia. *Journal of International Accounting, Auditing and Taxation*, 12(1), 45–62. [https://doi.org/10.1016/S1061-9518\(03\)00003-X](https://doi.org/10.1016/S1061-9518(03)00003-X)
- [13] Gupta, S., & Newberry, K. (1997). Determinants of the variability of corporate effective tax rates: evidence from longitudinal data. *Journal of Accounting and Public Policy*, 16(1), 1–34. [https://doi.org/10.1016/S0278-4254\(96\)00055-5](https://doi.org/10.1016/S0278-4254(96)00055-5)
- [14] Hsieh, Y. (2012). New evidence on determinants of corporate effective tax rates. *African Journal of Business Management*, 6(3), 1177–1180. <https://doi.org/10.5897/AJBM11.1522>
- [15] Wang, Y., Campbell, M., & Johnson, D. (2014). Determinants of effective tax rate of China publicly listed companies. *International Management Review*, 10(1), 10–20. Retrieved from <http://www.scholarspress.us/journals/IMR/pdf/IMR-1-2014/v10n1-art-2.pdf>

- [16] Wu, L., Wang, Y., Luo, W., & Gillis, P. (2012). State ownership, tax status and size State ownership, tax status and size effect of effective tax rate in China, (June 2013), 37–41.
- [17] Carreras, M., Dachapalli, C., & Mascagni, G. (2017). Effective corporate tax burden and firm size in South Africa A firm-level analysis.
- [18] Noor, R. M., Fadzilah, N. S., & 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.
- [19] Oyeyemi, G., Babatunde, A., & State, O. (2016). Tax Planning and Financial Performance of. *International Journal of Advanced Academic Research*, 2(7), 64–80.
- [20] Yinka, M. S., & Uchenna, C. E. (2018). Firm specific determinants of corporate effective tax rate of listed firms in Nigeria. *Journal of Accounting and Taxation*, 10(2), 19–28. <https://doi.org/10.5897/JAT2017.0288>
- [21] Savitri, E. (2017). Determinants of Effective Tax Rate of the Top 45 largest listed companies of Indonesia. *International Journal of Management Excellence*, 9(3), 1183–1188.
- [22] Dyreng, S. D., Hanlon, M., Maydew, E. L., & Thornock, J. R. (2017). Changes in corporate effective tax rates over the past 25 years. *Journal of Financial Economics*, 124, 441–463. <https://doi.org/10.1016/j.jfineco.2017.04.001>
- [23] Moreno-Rojas, J., González-Rodríguez, M. R., & Martín-Samper, R. C. (2017). Determinants of the effective tax rate in the tourism sector: a dynamic panel data model. *Tourism & Management Studies*, 13(3), 31–38. <https://doi.org/10.18089/tms.2017.13304>
- [24] Ribeiro, A., Cerqueira, A., & Brandao, E. (2015). The Determinants of Effective Tax Rates: Firms' Characteristics and Corporate Governance. *FEP Working Papers* ISSN: 0870-8541, 0870–8541(12), 1–45. Retrieved from <http://wps.fep.up.pt/wplist.php>
- [25] Delgado, F. J., Fernandez-Rodriguez, E., & Martinez-Arias, A. (2014). Effective tax rates in corporate taxation: A quantile regression for the EU. *Engineering Economics*, 25(5), 487–496. <https://doi.org/10.5755/j01.ee.25.5.4531>
- [26] Kraft, A. (2014). What really affects German firms' effective tax rate? *International Journal of Financial Research*, 5(3), 1–19. <https://doi.org/10.5430/ijfr.v5n3p1>
- [27] Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management? *Journal of Corporate Finance*, 16(5), 703–718. <https://doi.org/10.1016/j.jcorpfin.2010.08.005>
- [28] Nomura, H. (2017). What Determines Japanese Corporate Effective Tax Rates? Evidence from Firms Listed on the Tokyo Stock Exchange, (June), 1–18.
- [29] Noor, R. M., Mastuki, N., & Bardai, B. (2008). Corporate Effective Tax Rates: A Study on Malaysian Public Listed Companies. *Malaysian Accounting Review*, 7(1), 1–20.
- [30] Noor, R. M., Mastuki, N., & Bardai, B. (2010). Tax Planning and Book-Tax Difference. In *Proceedings of 2010 International Conference on Business, Economics and Tourism Management* (pp. 251–255).
- [31] Hadjidema, S., Stamatopoulos, I., & Eleftheriou, K. (2016). Explaining Corporate Effective Tax Rates Before and During the Financial Crisis: Evidence from Greece. *Munich Personal RePEc Archive* Edwards, A., Schwab, C., & Shevlin, T. (2016). Financial constraints and cash tax savings. *Accounting Review*, 91(3), 859–881. <https://doi.org/10.2308/accr-51282>
- [32] Fernández-Rodríguez, E., & Martínez-Arias, A. (2014). Determinants of the Effective Tax Rate in the BRIC Countries. *Emerging Markets Finance & Trade*, 50(March), 214–228. <https://doi.org/10.2753/REE1540-496X5003S313>
- [33] Mascagni, G., & Mengistu, A. (2018). Effective tax rates and firm size in Ethiopia. *Development Policy Review*, 1–40. <https://doi.org/10.1111/dpr.12400>
- [34] Masnoon & Saeed (2014) "Capital Structure Determinants of KSE Listed Automobile Companies" *European Scientific Journal*, May edition Vol. 10, No. 13, 451-461
- [35] 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>
- [36] Pratama, A. (2017). Company Characteristics, Corporate Governance and Aggressive Tax Avoidance Practice: A Study of Indonesian Companies. *Review of Integrative Business and Economics Research*, 6(4), 70–81.
- [37] Kasim, F. M., & Saad, N. (2019). Determinants of Corporate Tax Avoidance Strategies among Multinational Corporations in Malaysia. *International Journal of Research in Business Studies and Management*, 6(5), 1–6.
- [38] Hussin, Siti Nor Adawiyah, & Noor, R. M. (2012). The dual role of auditor-provided tax services (ATS) in SMEs tax planning. In *CHUSER 2012 - 2012 IEEE Colloquium on Humanities, Science and Engineering Research* (pp. 351–356). <https://doi.org/10.1109/CHUSER.2012.6504338>
- [39] Hazir, A. (2019). Determinants of Effective Tax Rate in Turkey. *Journal of Research in Business*, 4(1), 35–45. <https://doi.org/10.23892/JRB.2019453293>
- [40] Economic Census 2016, Department of Statistic, Malaysia, 2017. (2017). CHAPTER 1 THE MALAYSIAN ECONOMY special highlights Economic Census 2016: Profile of SMEs. Retrieved from [http://www.smecorp.gov.my/images/SMEAR/latest/2/Census\\_English\\_FINAL.pdf](http://www.smecorp.gov.my/images/SMEAR/latest/2/Census_English_FINAL.pdf)
- [41] Graham, J. R., Hanlon, M., Shevlin, T., & Shroff, N. (2013). Incentives for Tax Planning and Avoidance: Evidence from the Field Incentives for Tax Planning and Avoidance: Evidence from the Field. <https://doi.org/10.2308/accr-50678>
- [42] Edwards, A., Schwab, C., & Shevlin, T. (2016). Financial constraints and cash tax savings. *Accounting Review*, 91(3), 859–881. <https://doi.org/10.2308/accr-51282>
- [43] Vintilă, G., Gherghina, Ș. C., & Păunescu, R. A. (2018). Study of Effective Corporate Tax Rate and Its Influential Factors: Empirical Evidence from Emerging European Markets. *Emerging Markets Finance and Trade*, 54(3), 571–590. <https://doi.org/10.1080/1540496X.2017.1418317>
- [44] MASB. (2001). Malaysian Accounting Standard Board (MASB) Inventories, (388), 1–72.
- [45] Elena-Irina, D., & Vintila, G. (n.d.). Analyzing the Determinants of Effective Tax Rate.

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