

-RESEARCH ARTICLE-

## THE EFFECTS OF TAX PLANNING ON EARNINGS MANAGEMENT OF THAI LISTED COMPANIES

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### —Abstract—

This article discusses the extent of tax planning, earnings management, and the impact of TP on EM. The quantitative analysis utilized probability sampling to collect 901 company-year performance reports from 354 publicly traded firms in seven industry groupings between 2015 and 2017: AGRO, CONSUMP, PROCON, INDUST, RESOURCE, SERVICE, and TECH (exclude Finance Ind.). The EM was computed using the Kothari, Leone, and Wasley (2005) equation and Multiple Regression Analysis (MRA). They stated that, compared to the first year, the EM grew overall, with the INDUS group following the market trend. Conversely, the groups with rising EM are SERVICE and TECH, whereas AGRO and CONSUMP have declining EM. Concerning the three TPs, Effective Tax Rate: TP(ETR) discovered overall market fluctuations, declining trends in AGRO and INDUS, and rising trends in SERVICE. Cash Flow from Operations: TP(TAX/CFO) discovered general market volatility, growing trends in PROPCON and TECH, rising trends in INDUS and SERVICE, and a declining trend in PROPCON. Test of TP's effect on EM using MRA Model 2 demonstrated statistically significant negative effects of TP(TAX/CFO) and positive effects of controlling factors CONSUMP, INDUST, and PROPCON.

**Keywords:** Tax planning, Earnings management, The Stock Exchange of Thailand, MAI

### 1. INTRODUCTION

Companies listed on a stock exchange seek to develop opportunities in investor fundraising, capital restructuring, ownership structure, competitive advantage

Citation (APA): Lim-u-sanno, K. (2022). The Effects of Tax Planning on Earnings Management of Thai Listed Companies. *International Journal of Economics and Finance Studies*, 14 (02), 139-155. doi:10.34111/ijefs. 20220028

enhancement, and risk mitigation. The stock exchange requires listed companies to disclose various reports as required (Office, 2014). Disclosure of income or profit is crucial for investors' evaluation of a company's risk, performance, stability, and profitability. The operation's net profit will determine the juristic person tax, which the corporation cannot avoid (Kumawat & Soral, 2020; Sriyakul, Jermstittiparsert, Joemsittiprasert, & Pamornmast, 2019). Tax Planning consists of the taxpayer's efforts to minimize the amount of tax they are legally obligated to pay. This is because no one would run a business solely to pay tax or pay it in full (Rocky Alfian & Nurdayadi, 2019; Sae-Lim, 2019). To be effective at tax reduction, TP must be accurate and exhaustive, and errors in TP will quickly lead to Tax Avoidance (TA) (Flagmeier, Müller, & Sureth-Sloane, 2021; Hope, Ma, & Thomas, 2013; Klinphanich, 2019), which will result in fines and a loss of trust in the business (Juhandi, Fahlevi, and Setiadi, 2019). The premise of TP is that the tax burden is a cost to the enterprise. The less tax paid, the greater the profit (Assidi, Aliani, & Omri, 2016). TP can cut tax costs in various ways to minimize tax burden while still making legitimate financial statements following local laws, rules, Revenue Codes, and tax rights (Frank, Lynch, & Rego, 2009). TP is commonly associated with income and earnings management (EM) (Rocky Alfian & Nurdayadi, 2019; Sae-Lim, 2019), as TP measures skew income to approach zero to reduce the juristic tax burden. Therefore, the influence of TP on EM is substantial (Moardi, Salehi, Poursasa, and Molavi, 2020). Businesses with a higher income tax rate will likely distort their income more (Goksel & Ali, 2020).

Nonetheless, EM varies by industry sector based on a company's performance management philosophy and profit data concerning the TP, influencing tax calculation (Ngoc, Duc, Xuan, & Thanh, 2020). In contrast, EM is considered an attempt to avoid, cover, and conceal genuine income to the point where it becomes TA. Although TA does not always indicate that a firm has violated the Internal Revenue Code, many countries permit companies to benefit from this juristic tax (Flagmeier et al., 2021) due to imprecise and problematic enforcement. This may expose organizations to the risk of incomplete transactions and consequent income-based tax calculation problems (Kongsasone, Dampitakse, & Phoprachak, 2019). Assidi et al. (2016) employ EM assessment as Opportunistic effects via Discretionary Accruals quality and Future Cash Flow to evaluate and summarize all types of EM as Predictive components, Opportunism in this firm. Effective tax rate (ETR), TAX/CFO, and TAX/ASSET are the three methods for determining the TP.

Nonetheless, EM and TP may include intentional error or omission in the preparation of financial statements relevant to crucial facts and accounting information used to discuss the reasons why companies fail, account management, TA, securities fraud, and company sales. It was determined that it misled users of such financial data (Goksel & Ali, 2020; Sriyakul et al., 2019). Numerous TP and EM dilemma studies are associated with firm performance and future performance (Okafor, Ezeagbe, & Innocent, 2018) because EM might profit from TP through predictable qualities that demonstrate

maximal usage or exploitation, which is the objective of the research. This article presents TP and TM along with the effect of the seven industry types of SET-listed companies: Agro & Food Industry (AGRO), Consumer Products (CONSUMP), Industrials (INDUS), Property & Construction (PROPCON), Resources (RESOURC), Services (SERVICE), and Technology (TECH) (exclude Financials Industrial) that could understand each industry type and use the results of this research to formulate intermediate- and long-term strategies. This study aims to comprehend: (1) the TP and EM of SET-listed firms based on industrial groups. And (2) the impact of TP and EM on enterprises listed on the SET.

## 2. LITERATURE REVIEW

### 2.1 Tax Planning (TP)

Any productive firm incurs tax liability (Department, 2015). Tax management in TP can be accomplished by choosing tax benefits that reduce the tax burden and improve the activity's net profit and cash flow (Kulsiriwanit, 2021). Through business-related tax rates such as Activation of operations, Investment, and Activation finance, the notion of Tax expense (Current tax + Deferred tax) tries to lower current taxable income, which can be perceived as an increase in future taxable income (Rocky Alfian & Nurdayadi, 2019). TP has a negative influence on corporate value, shareholder market value, and tax profit, but not on accounting profit. Therefore, TP requires performance measurement and tax management (Kulsiriwanit, 2021). There were three ways of TP evaluation in this study: 1) Effective Tax Rate (ETR), which applies the pre-taxed income tax on juristic persons to the pre-taxed income of the current period. The lower ETR and disparity between it and the statutory rate imply TP: Low ETR indicates high TP (Waroonkun, 2019). In this manner, tax profit may be reduced without affecting accounting profit (Kulsiriwanit, 2021) 2) Cash Flow from Operation (TAX/CFO) is another TP indicator that relies on ambiguity and loopholes in Revenue Codes (Kongsasone et al., 2019). This indicator may be examined by operational cash flow, which reveals non-cash income and expenses. EM does not affect net cash flow in this instance, and if the company has minimal tax expense, operational cash flow will improve, resulting in a decrease in the TAX/CFO ratio (Kongsasone et al., 2019). Low TAX/CFO means high TP (Waroonkun, 2019) and 3) Total ASSET(TAX/ASSET), which is calculated from the ratio of tax to an asset, based on the concept that total asset is a major base capital for the operation and the hypothesis that companies with the same amount of asset should have the same level of utilization and profitability, and thus the same level of the tax burden. Low TAX/ASSET indicates a high TP (Thanjunpong, 2018). Alternatively, the TAX/ASSET ratio harms performance (Kulsiriwanit, 2021)

## 2.2 Earnings Management (EM)

Earnings Management (EM) employs opportunistic management-based accounting procedures to maximize the performance of a corporation (Kumawat & Soral, 2020). Utilization of a specific accounting approach empowers and shapes EM behavior by expecting a higher return. Despite the widespread acceptance of EM as a management principle, there is also evidence of deliberate interference in financial reporting since accounting systems and steps demonstrate the company's attempt to alter, conceal, and manipulate the statistics in the financial statement. This is an example of exploitative management. EBIT, or Earnings Before Interest and Taxes, will impact tax calculation and result in net profit after tax (Rocky Alfian & Nurdayadi, 2019).

Due to the relationship between EM and EBIT, and its usefulness as information for investors, creditors, and business owners in risk assessment for investment, credit analysis, and study of firm viability, EBIT margin (EM) is a significant metric (Dang, et al., 2020). EM can alter EBIT to the extent that it is exploitative management (Kumawat & Soral, 2020; Rocky Alfian & Nurdayadi, 2019). Thus, there is great interest in comprehending the EM, and there are tests to detect abnormalities (Kumawat & Soral, 2020). The fundamental empirical model of EM can be divided into three categories: (1) Aggregate accruals employ deliberation in estimating; (2) Specific accruals is the computation of accruals as opposed to income management, using a financial statement; and (3) Distribution of earnings, which uses statistical methods to manage profit from income composition. The visible, good result of EM is what management should do and is successful revenue management. However, the negative result is perceived as exploitative management behavior.

The EM and its link to Cash Flow from Operations are that, according to accrual-based models, income may be constrained by non-cash expenses, but cash flow may be used to adapt income to accruals, which is much simpler to manage (Goksel & Ali, 2020). The EM that employs opportunistic effects based on discretionary accruals quality and demonstrates a favorable association with future cash flow satisfies the criterion for predictive elements. Conversely, a negative association implies exploitation, and the absence of a strong link precludes income management (Moardi, Salehi, Poursasan, & Molavi, 2020). The accrual-based models also explain EM that exhibits aberrant accruals, such as accruals that are smaller than anticipated (Kumawat & Soral, 2020).

Total ASSET value is an accounting value and a variable used to test and evaluate the EM. Relationships between EMs based on accrual-based models result in dramatically different stock returns for companies with and without Ems (Moardi et al., 2020). Depreciation and amortization typically contribute to the Deferred Tax Expense from ASSET, which is used as income tax expense awaiting reduction. Nonetheless, the relevance of depreciation and amortization on EBIT was obscured by more critical factors like sales, costs, stock price, and total assets (Rocky Alfian & Nurdayadi, 2019).

### 2.3 Tax Planning (TP) and Earnings Management (EM)

The motive of management that influences EM by the management's discretion is discretionary Accruals (Shafai, Amran, & Ganesan, 2018). Consistent with the theories of Entrenchment effect and Alignment effect, which demonstrate management power and a high degree of self-interested number distortion, there is a tendency for profit distortion that may have a good or negative impact on profit quality depending on the circumstances. This will decrease the value of the company's assets and may have a detrimental impact on the quality of its financial statements. TP, the company's effort to lower the tax burden to the legal minimum, is frequently associated with EM (Assidi et al., 2016). TP describes attempts to minimize juristic tax. Companies with high-income tax rates are shown to cut their income to near-zero levels. As a result, companies with higher average income tax rates are more likely to distort their income, demonstrating a substantial relationship between TP and average income tax rates (Rocky Alfian & Nurdayadi, 2019).

Nonetheless, an acceptable degree of distortion is still permissible (Strakova, 2021), i.e., management may influence the financial reporting process to demonstrate the achievement of a financial goal in terms of organizational management. This action is typically motivated by self-interest (Srijunpetch, 2019), particularly in a business that grants management authority following agency theory. This allows the EM to mislead or alter performance reports via accounting restructuring and profit manipulation (Shafai et al., 2018; Toumeh & Yahya, 2017).

### 2.4 Earnings Management (EM) in Each Industry

Studies indicate that EM and TP vary amongst industry types. Okafor and Ezeagba (2018) discovered that the degree of EM negatively correlates with the performance of industrial group merging enterprises. In addition, the consumer goods industry substantially impacts the Firms' value and Pre-purchase abnormal accruals. Moardi et al. (2020) found no predictable or exploitative EM in the Agro and Food industry (AGRO) and concluded no significant association between EM and managerial compensation. Regarding the consumer goods sector, Nurdayadi (2019) found that listed companies in Bursa Efek Indonesia had increasing TP through EM, but did not find any effect of deferred tax expense on the company's profitability; TP's effect on the company's profitability was via deferred Tax Expense, in line with depreciation and amortization. Regarding the Machine & Automotive Industrial, Moardi et al. (2020) discovered a negative impact of EM on discretionary accruals and future cash flow, as well as the significance of CEO compensation on EM. Moardi et al. (2020) discovered that EM harmed discretionary accruals and future cash flow in the Resource group and that the CEO's compensation varied significantly.

### 3. RESEARCH FRAMEWORK

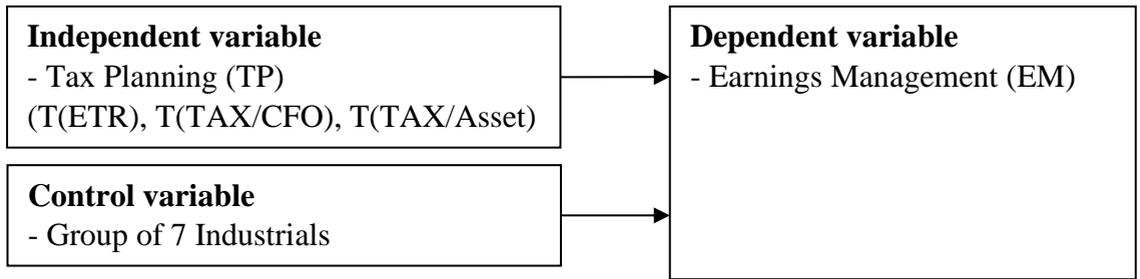


Figure 1: A research framework

### 4. RESEARCH METHOD

#### 4.1 Listed Companies Disclosure Information

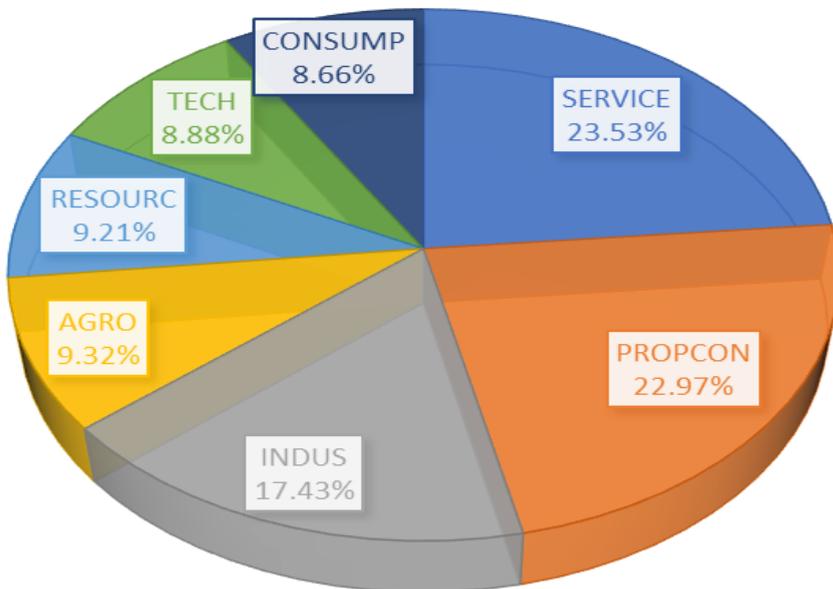


Figure 2. Sample distribution

This quantitative investigation was limited to 624 Securities Exchange of Thailand-listed businesses with performance reports between 2015 and 2017 and 1,062 company years of reporting (Thailand, 2019). Purposive sampling was used to pick the sample group, and businesses with insufficient data were excluded. (Hu, Cao, & Zheng, 2015) compiled reports from 354 companies in seven categories: AGRO, CONSUMP, INDUS, PROPCON, RESOURCE, SERVICE, and TECH (excluded Financials). 901 authentic company years of reports were examined. (As figure 2)

Figure 2 depicts the number of sample disclosure reports for seven distinct industries. SERVICE possessed 212 company years (23.53 percent), PROPCON possessed 207 company years (22.97 percent), INDUS possessed 157 company years (17.43 percent), AGRO possessed 84 company years (9.32 percent), RESOURC possessed 83 company years (9.21 percent), TECH possessed 80 company years (8.88 percent). CONSUMP possessed 78 company years (7.88 percent) (8.66 percent).

This study's secondary data collection included firm size, total debt, shareholding, juristic tax burden, pre-jurisdictional tax profit, total asset, and net cash flow from the annual company report (56-1 form) published on the SET website between 2015 and 2017.

(1) EM calculation study utilizing equation and measurement of a variable using a model created by Kothari, Leone, and Wasley (2005), which measured the management's discretionary and non-discretionary accruals, were used to analyze the research data. The discretionary accruals were computed using the difference between the total accruals (Office) divided by the total asset at the beginning of the year ( $A_{t-1}$ ) and the non-discretionary accruals (NDAC<sub>t</sub>), as shown in the equation below.

(2)

**Step 1:** Calculation of total accruals

$$DAC_t = \frac{TA_t}{A_{t-1}} - NDAC_t$$

**Step 2:** Estimation of coefficient of Equation (1)

$$TA_t = (\Delta CA_t - \Delta Cash_t) - \Delta CL_t + \Delta DCL_t - Dep_t$$

**Step 3:** Calculation of NDAC by entering the coefficient from Equation (1) in the regression formula (2)

$$\frac{TA_t}{A_{t-1}} = \alpha_1 \left[ \frac{1}{A_{t-1}} \right] + \alpha_2 \left[ \left( \frac{\Delta REV_t - \Delta REC_t}{A_{t-1}} \right) \right] + \alpha_3 \left( \frac{PPE_t}{A_{t-1}} \right) + \alpha_4 (ROA_t) + \varepsilon \quad (1)$$

$$NDAC_t = \alpha_1 \left[ \frac{1}{A_{t-1}} \right] + \alpha_2 \left[ \left( \frac{\Delta REV_t - \Delta REC_t}{A_{t-1}} \right) \right] + \alpha_3 \left( \frac{PPE_t}{A_{t-1}} \right) + \alpha_4 (ROA_t) \quad (2)$$

**Step 4:** Calculate DAC by finding the difference between the (Office) and NDAC. In other words, DAC means an error of Equation (1)

$$DAC_t = \frac{TA_t}{A_{t-1}} - \left[ \alpha_1 \left[ \frac{1}{A_{t-1}} \right] + \alpha_2 \left[ \left( \frac{\Delta REV_t - \Delta REC_t}{A_{t-1}} \right) \right] + \alpha_3 \left( \frac{PPE_t}{A_{t-1}} \right) + \alpha_4 (ROA_t) \right]$$

Or  $DAC_t = \varepsilon$

By the following definition;

- $TA_t$  = Total accruals in year t  
 $\Delta CA_t$  = Change in the current asset in year t  
 $\Delta Cash_t$  = Change in cash and cash equivalent in year t  
 $\Delta CL_t$  = Change in current liability in year t  
 $\Delta DCL_t$  = Change in Degree of Combined Leverage in year t  
 $Dep_t$  = Depreciation in year t  
 $A_{t-1}$  = Total company asset in year t – 1  
 $\Delta REV_t$  = Change in revenue in year t, equals to  $REV_t - REV_{t-1}$   
 $\Delta REC_t$  = Change in receivable in year t, equals to  $REC_t - REC_{t-1}$   
 $PPE_t$  = Property, Plant, and Equipment in year t  
 $ROA_t$  = Return of Asset in year t, equals the ratio of net profit to total asset  
 $\alpha_i$  = Parameters,  $i = 1, 2, 3, 4$   
 $\epsilon$  = error

(2) TP calculation using Tax Rate (ETR) = juristic income tax burden/pre-juristic tax profit. Cash Flow from Operation (TAX/CFO) = juristic income tax burden/net cashflow and Total ASSET(TAX/ASSET) = juristic income tax burden/total asset. Data analysis was done through trend analysis to compare the fluctuation, increase and decrease in the last three years. (3) presentation was done using basic descriptive statistics like mean, standard deviation, maximum, minimum, and multiple linear regression with two models. The research result was concluded through an analysis of the influence of tax planning (TP) on earnings management (EM). The first model showed the overall picture, and the second model was split by industry type as follows:

Model# 1

$$EM = \beta_0 + \beta_1(ETR) + \beta_2(TAX/CFO) + \beta_3(TAX/ASSET) + \epsilon$$

Model# 2

$$EM = \beta_0 + \beta_1(ETR) + \beta_2(TAX/CFO) + \beta_3(TAX/ASSET) + \beta_4IND_1 + \beta_5IND_2 + \beta_6IND_3 + \beta_7IND_4 + \beta_8IND_5 + \beta_9IND_6 + \beta_{10}IND_7 + \epsilon$$

## 5. RESEARCH RESULT

### 5.1 Tax Planning (TP) and Earning Management (EM)

Study of preliminary data, all three methods of TP calculation and EM calculation based on reports from listed companies both overall and by industry type were shown in [Table 1](#).

From the data between 2015-2017, it was found that overall, the amount of EM has increased compared to the first year (Mean -0.037, -0.017, and -0.020; SDAV 0.168), but the data is negative. INDUS (MeanAV 0.014, SDAV 0.297) follows the overall market image, while SERVICE (MeanAV -0.055, SDAV 0.083) and TECH (MeanAV -0.025, SDAV 0.104) were rising. On the other hand, AGRO (MeanAV -0.041, SDAV 0.095) and CONSUMP (MeanAV -0.004, SDAV 0.073) were dropping. Other groups were in flux.

Result of TP(ETR) calculation showed overall market fluctuation (Mean 0.231, 0.150, and 0.308; SDAV 2.831). AGRO was found to be foundering (MeanAV 0.482, SDAV 2.403). INDUS (MeanAV 0.128, SDAV 0.186) and SERVICE (MeanAV 0.765, SDAV 5.694) were on the rise with the highest Standard Deviation compared with other groups. The rest of the groups were in flux.

Result of TP (TAX/CFO) showed fluctuation in the overall picture (Mean 0.075, -0.196, and 0.196; SDAV 1.516). PROP CON (MeanAV -0.018, SDAV 1.013) and TECH (MeanAV 0.034, SDAV 0.200) were on the rise, CONSUMP (MeanAV 0.444, SDAV 1.964) was flopping. The rest of the groups were in flux.

Result of TP (TAX/ASSET) showed that the market overall was stable (Mean 0.014, 0.014, and 0.013; SDAV 0.014). SERVICE (MeanAV 0.017, SDAV 0.018) and CONSUMP (MeanAV 0.011, SDAV 0.010) followed the market trend. INDUS (MeanAV 0.013, SDAV 0.014) was rising, PROP CON (MeanAV 0.012, SDAV 0.010) was dropping. The rest of the groups were in flux.

### 5.2 Tax Planning (TP) effect Earning Management (EM)

A study on the effect of Tax Planning (TP) on Earning Management (EM) in SET Listed Companies, using the Multiple Regression model (Model 1 and Model 2), yielded results as shown in [Table 2](#).

The study on Model 1 did not show any data that could conclude relationships between the three independent TP variables TP(ETR), TP(TAX/CFO), TP(TAX/ASSET), and EM variables. Still, negative effect of TP(ETR) -1.140(.255), TP(TAX/CFO) -1.819(.069), and positive effect of TP(TAX/ASSET) .635(.526) on EM was found.

Table 1. Tax Planning Level and Earning Management of SET-listed Companies

IND	ตัวแปร	2558		2559		2560		Average	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
AGRO	ETR	1.614	8.160	0.121	0.147	0.107	0.121	0.482	2.403
	TAX/CFO	0.090	0.089	0.181	0.193	0.123	0.146	0.120	0.127
	TAX/ASSET	0.014	0.012	0.018	0.013	0.012	0.010	0.013	0.011
	EM	-0.018	0.103	-0.026	0.273	-0.072	0.158	-0.041	0.095
CONSUMP	ETR	0.025	0.379	-0.032	0.894	0.022	0.364	0.001	0.478
	TAX/CFO	0.862	4.149	0.135	0.165	0.102	0.299	0.444	1.964
	TAX/ASSET	0.011	0.012	0.012	0.011	0.011	0.012	0.011	0.010
	EM	0.020	0.195	0.005	0.129	-0.033	0.078	-0.004	0.073
INDUS	ETR	0.071	0.370	0.145	0.136	0.166	0.215	0.128	0.186
	TAX/CFO	0.189	0.716	-0.065	0.959	0.521	2.756	0.151	0.950
	TAX/ASSET	0.013	0.012	0.015	0.015	0.016	0.014	0.013	0.013
	EM	-0.051	0.068	0.007	0.309	0.006	0.121	0.014	0.297
PROPCON	ETR	0.066	0.393	0.190	0.160	0.104	0.351	0.104	0.256
	TAX/CFO	-0.221	3.124	0.035	0.473	0.100	0.540	-0.018	1.013
	TAX/ASSET	0.015	0.015	0.012	0.011	0.011	0.011	0.012	0.010
	EM	0.003	0.204	-0.021	0.181	0.022	0.181	-0.002	0.093
RESOURC	ETR	0.179	0.291	0.131	0.158	0.154	0.134	0.134	0.175
	TAX/CFO	0.134	0.983	0.100	0.107	0.113	0.124	0.109	0.330
	TAX/ASSET	0.012	0.011	0.009	0.008	0.013	0.015	0.011	0.009
	EM	-0.136	0.452	0.028	0.348	-0.052	0.152	-0.052	0.260
SERVICE	ETR	0.094	0.476	0.161	0.190	0.862	5.954	0.765	5.694
	TAX/CFO	0.003	1.196	-1.011	8.146	0.205	0.449	-0.221	2.606
	TAX/ASSET	0.017	0.014	0.017	0.019	0.017	0.020	0.017	0.018
	EM	-0.061	0.107	-0.051	0.154	-0.041	0.101	-0.055	0.083
TECH	ETR	0.154	0.097	0.245	0.644	0.196	0.171	0.207	0.309
	TAX/CFO	-0.033	0.462	0.044	0.155	0.086	0.314	0.034	0.200
	TAX/ASSET	0.016	0.024	0.009	0.007	0.010	0.009	0.011	0.010
	EM	-0.035	0.103	-0.029	0.159	-0.013	0.160	-0.025	0.104
Average	ETR	<b>0.231</b>	<b>2.506</b>	<b>0.150</b>	<b>0.353</b>	<b>0.308</b>	<b>2.978</b>	<b>0.299</b>	<b>2.831</b>
	TAX/CFO	<b>0.075</b>	<b>2.117</b>	<b>-0.196</b>	<b>3.927</b>	<b>0.196</b>	<b>1.165</b>	<b>0.035</b>	<b>1.516</b>
	TAX/ASSET	<b>0.014</b>	<b>0.015</b>	<b>0.014</b>	<b>0.014</b>	<b>0.013</b>	<b>0.015</b>	<b>0.013</b>	<b>0.014</b>
	EM	<b>-0.037</b>	<b>0.197</b>	<b>-0.017</b>	<b>0.228</b>	<b>-0.020</b>	<b>0.142</b>	<b>-0.022</b>	<b>0.168</b>

The study on Model 2 to find the effect of average TP on EM revealed that adding control variables for seven industry types: AGRO, CONSUMP, INDUS, PROPCON, RESOURC, SERVICE, and TECH. The result showed F-Value (sig) = 1.919, and Adjusted R Square = 0.009 at the significance level .05. Regarding independent and control variables, negative relationship of TP(TAX/CFO) was shown at  $b = -1.959(.050^*)$ , positive relationship of CONSUMP was shown at  $b = 2.030(.043^*)$ , INDUS  $b = 2.073(.038^*)$  and PROPCON  $b = 2.838(.005^{**})$ . On the other hand, the relationship between TP(ETR), TP(TAX/ASSET), AGRO, RESOURC, SERVICE, and TECH could not be concluded. Nevertheless, a positive relationship was found between TP(TAX/ASSET), AGRO and TECH, and negative relationship TP(ETR) and RESOURC on EM.

**Table 2. Tax Planning effected Earning Management**

Variables	Model 1 <i>b</i> (p-value)	Model 2 <i>b</i> (p-value)
(Constant)	-3.096(.002)	-3.751(.000)
TP(ETR)	-1.140(.255)	-.994(.321)
TP(TAX/CFO)	-1.819(.069)	-1.959(.050*)
TP(TAX/ASSET)	.635(.526)	.880(.379)
AGRO		.586(.558)
CONSUMP		2.030(.043*)
INDUS		2.073(.038*)
PROPCON		2.838(.005**)
RESOURC		-.019(.985)
SERVICE***		.000(.000)
TECH		1.083(.279)
R Square	.005	.019
Adjusted R Square	.002	.009
F-Value (sig)	1.625(.182)	1.919(.046*)
*Significance level 0.05 ** Significance level 0.01, ***SERVICE industrial group Excluded predictors variable to EM.		

## 6. CONCLUSION AND DISCUSSION

The objectives of this study are to comprehend the TP and EM levels and their impact on SET-listed firms and to conclude and discuss the findings: 1) The TP concept based on TP(ETR) computation employed the current income tax expense to explain the impact on pre-tax accounting profit (TAX/EBIT) (Thanjunpong, 2018). Overall, while SET Listed Companies continued to have fluctuating TP, the average tax payment remained at 29.9 percent, indicating consistently good profit, as stated by Kulsiriwanit (2021), who stated that tax profit did not influence accounting tax and vice versa if a company has accounting profit, there will be no tax burden. According to the company's

ability, usage of tax exemption, and support of national tax operations, as well as the absence of tax penalty and additional retroactive tax, the best potential TP would be one in which the TP(ETR) fluctuated similarly between years with minimum variations for three years (Flagmeier et al., 2021). Comparing the average 3-year TP(ETR) across industry groups revealed that CONSUMP had the lowest TP(ETR) or, according to the idea, the greatest TP (Chotsuwan, 2018). Alternatively, INDUS, PROPON, RESOURC, and TECH all have similar levels, while AGRO's TP(ETR) has decreased by one-third, indicating a greater application of TP.

2) Calculation of TP(TAX/CFO) found that overall, SET Listed Companies saw minimal changes in response to fluctuating market conditions (Sribunruang, 2021). On the other side, TP(TAX/CFO) indicated that it may be affected by EM through accruals and that TAX/CFO would therefore remain low, showing a high degree of TP (Thanjunpong, 2018). Regarding TP(TAX/CFO) in AGRO, INDUS, and RESOURC, a similar level was observed, indicating the use of the optimal TP based on national tax exemptions and tax support. In contrast, PROCON and SERVIC's TP(TAX/CFO) changed from negative to positive at the same level, showing an increase in the use of TP(TAX/CFO), consistent with Kongsasone et al. (2020). CONSUMP reduced its TP (TAX/CFO) compared to other groupings. Although TP (TAX/CFO) depended on legal loopholes and ambiguity that resulted in a reduction in TAX/CFO, it was still dependent on fluctuations in the company's actual net cash flow. In agreement with Kongsasone et al., the TAX/CFO would be lower if the business had a smaller tax burden and a higher cash flow from operations (2020). 3) TP(TAX/ASSET) calculation demonstrated that SET-Listed Companies had stable ratios with a minor decrease. TP(TAX/ASSET) revealed that the firm with a steady TP and a rise in TP derived from a greater firm size. However, Thanjunpong agreed with the notion that enterprises with the same asset worth should have comparable utilization, profitability, and tax burden (2018). Larger businesses would have more accounting and tax-savvy employees and more effective EM. In contrast, negative TP(TAX/ASSET) indicated EM under discretionary accruals of the management that paid attention and defined a guideline for good governance together with economic value added, which might explain the declining EM following Panichpipat (2021). When reviewing each industry group, each had a comparable level, at the lowest level permitted under national tax exemption and support. The TP(TAX/ASSET) ratio for PROPON and TECH has decreased marginally in the past three years. 4) The second purpose was to examine the three types of TP and their impact on the EM of SET-listed companies, together with a control variable (industry type). However, TP affected EM of SET-listed businesses (Kulsiriwanit, 2021). TP that depended on manipulating CFO to obtain a low TAX/CFO through willful data distortion was in opposition to the agency theory due to its negative impact on good governance. EM and TP did affect performance, but if TP was down while EM was increasing, it might indicate a readiness to pay a bit more tax to avoid notice and external inspection. In contrast, businesses that lower profits to reduce the tax burden may lose

consumer confidence and brand reputation (Thanjunpong, 2018). Relationships between TP(ETR) and TP(TAX/ASSET) and EM could not be determined conclusively; with the rate of TP(ETR) and TP(TAX/ASSET), it was possible that the EM level would follow the national tax benefit, following Phakdee and Srijunpetc (2021); Surintaraseree, Samandusanee, and Sonthithum (2007); and Phakdee and Srijunpet (2020). Control factors such as CONSUMP, INDUST, and PROPCON positively affect EM. Hence the greater EM in these groups can be explained (Kulsiriwanit, 2021). (5) Adverse effects of TP(TAX/CFO) as independent variables influencing EM concurred with Kongsasone et al. (2020) 's assertion that non-cash income and expense should not be affected by accrual EM when calculating net cashflow. In the event of rising expenses, the TAX/CFO ratio would rise, indicating a decline in EM. In contrast, the effects of EM would decrease TAX/CFO and boost EM (Waroonkun, 2019). Nonetheless, if the conclusion were drawn in the same manner as the Opportunistic impacts EM of Moardi et al. (2020), which demonstrated a negative association as Predictive factors for EM or exploitation utilizing EM, the results would be contradictory. The accrual-based models also explained genuine accruals that were smaller than expected (Kumawat & Soral, 2020).

## 7. RECOMMENDATION

TP & EM in this study can be used as a guideline for the management to employ accounting policy and tax benefit to maximize the benefit for stakeholders and confidence in the company, a guideline for government agencies to enact measures, tax policies, and others to improve efficiency in national development, and a guideline for the interested public to comprehend the significance of TP & EM.

Regarding the context of Thailand, according to to act Amending the Revenue Code (No.42), B.E. 2559 (2016) on reduction of personal income tax, adjustment of the income tax rate from a company or partnership's net profit to 20% from the accounting period beginning 1 January 2016 onwards, along with long-term tax reduction, profiting companies were required to pay tax on up to 30% of their tax profit and to maintain high levels of tax compliance and accounting. This included the possibility of utilizing tax benefits to reduce tax liability, prompting management to implement TP and accounting policies. Consequently, the adoption of TP and EM in businesses increased. Despite TP's compliance with tax rules and its impact on accounting profit, a greater TP would result in a lower effective tax rate than is allowed by law (20 percent ). This would provide the appearance of tax evasion or tax avoidance, which could constitute corruption or a violation of the law.

Using tax-exempt income benefits, expense deductions, or other tax benefits would minimize the company's tax burden, so the correct TP and EM would not result in the company incurring penalties, additional retroactive tax, or a loss of faith and reputation.

## 8. IMPLICATIONS

The study of TP and EM levels of SET-listed businesses revealed that results from all three TP study techniques and EM of SET-listed companies, based on 901 company-years of data from seven industry groups, indicated that Tax Rate (ETR) and TAX/CFO had relatively variable TP. In 2016, the average ETR and TAX/CFO were the lowest, signifying the highest TP, which may be ascribed to the enforcement of the tax exemption and tax operation support act under the 2015 Revenue Code and the Royal Decree Governing Reduction of Tax Rates and Exemption of Taxes (No. 595) 2015. Companies eligible for these benefits would be excluded from tax inspection. They would not be required to pay fines or additional taxes due to retroactive tax payments, resulting in a lower tax burden. As the average firm size expanded, TAX/ASSET decreased annually, indicating a rising proportion of TP each year.

This research was conducted in Thailand. Currently, SET-listed firms pay more attention to the notion of good governance. Therefore, the overall amount of EM was decreasing. Nonetheless, variances and fluctuations in TP depend on the company's features and method of tax payment.

## 9. LIMITATION

This study was limited by the ever-changing tax benefit legislation, which resulted in a very adaptable TP. Only three years of data collection may be insufficient for testing firm TPs. For future research, it was suggested that the financial industry group, which had different financial statement data than other groups, be investigated. Testing TP or EM, researching additional trends, or expanding on this work by increasing the number of elements, business size, financial risk, or any other variables included in the study.

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