

Tax Avoidance and Tax Risk Management Impacts on Earnings Response Coefficient

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Abstract. This research aims to analyse tax risk management role as a moderating variable in tax avoidance relationships with the earnings response coefficient. The research uses all samples of the non-financial multinational companies on Indonesian and Malaysian stock exchanges. The outcome is tax risk management can strengthen the positive effect of tax avoidance on Earnings Response Coefficient. This proves that the tax risk management can be the control from the multinational corporations in handling tax avoidance. Companies that accomplish improved tax risk management can increase pre-tax income transparency that they present, thereby increasing earnings informativeness (ERC).

Keywords: tax risk management; tax avoidance; earnings response coefficient

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INTRODUCTION

Tax is a burden that is always avoided by companies. They seek to minimise it by utilising system weaknesses and prevailing tax provisions. Companies have an incentive to reduce taxes by taking aggressive tax actions (Chen et al., 2010). Aggressive tax action is tax avoidance activity with the primary objective to reduce tax liabilities (Slemrod, 2004; Slemrod and Yitzhaki, 2002). In this case, tax avoidance is achieved in a way that does not violate applicable regulations.

Companies' ability to report earnings can provide useful information. It is an element of earnings quality. The information provided can influence investors' decisions and is reflected in stock prices (Zimmerman, 1983); it is also called the earnings response coefficient, which is a substitution of earnings quality. There is some evidence to suggest that tax avoidance can have an impact on earnings informativeness. Kubata et al. (2013) found that corporate tax avoidance can decrease earnings informativeness, as measured by the earnings response coefficient (ERC).

Tax savings will cause an increase in net cash flow and income after tax, so this will increase company value (Desai & Dharmapala, 2009). Conversely, tax planning will incur costs, both explicitly and implicitly (Scholes, Wolfson, Erickson, Maydew, & Shevlin, 2009). Tax avoidance aims to reduce tax costs explicitly by managing taxable income. There is a valid argument why tax avoidance can reduce the informativeness of reported earnings, because it can reduce corporate transparency by increasing financial and organisational complexity, which also generally affects the reporting environment (Balakrishnan, Blouin, & Guay, 2012; Wagener & Watrin, 2013). This will directly reduce earnings informativeness, especially in pre-tax income. Tax avoidance can interfere with the ability of investors to fully understand the basic situation of companies, whose operating performance is reflected in pre-tax income.

The harmful effect of tax avoidance can be decreased by tax risk management application. This includes comprehension on how tax risks occur and making an evaluation to agree on how they can be managed. PricewaterhouseCoopers (2004) developed management guidelines which state that every decision, activity and operation carried out by a company causes uncertainty in business risk. Some hesitations on taxes concern tax laws application and practices to reliable

facts. Therefore, this hesitation will pose a tax risk, so the objective of tax risk management is to manage this hesitation.

This study acquires a research construct so as to analyse the tax avoidance effect on earnings informativeness, which is reflected in the Earnings Response Coefficient (ERC), as well as to analyse the tax risk management role in decreasing the negative effect of tax avoidance on earnings informativeness. Tax risk management is a tax strategy role that is assumed to decrease the negative effect of companies' tax avoidance. This study uses multinational corporations registered in Indonesia and Malaysia throughout 2010 to 2016. Both countries are developing countries in the ASEAN region, with the companies registered that have the same characteristics. The research succeeds in proving that tax risk management can decrease the negative effect of tax avoidance on earnings informativeness that it can increase the transparency of a company's financial statements which admit them to increase the informativeness of earnings reflected in income before tax. A contribution of the study results is that the tax risk management can be functioned as a control for the corporations, especially the multinational ones, for the essential risk of tax avoidance.

Tax Avoidance

Relatively high costs of tax encourage companies to display aggressive tax behaviour (Chen et al. 2010). This includes transactions whose main purpose is to reduce tax obligations, and is part of tax avoidance activities in general (Slemrod, 2004; Slemrod & Yitzhaki, 2002). Aggressive tax behaviour can be categorised as part of tax avoidance, thus the size used is the same as the proxy for tax avoidance. Slemrod and Yitzhaki (2002) affirmed that tax avoidance is conducted by not violating applicable provisions, namely by utilising weaknesses in the taxation system. Tax avoidance is related to the earnings management conducted for tax purposes. Hanlon and Heitzman (2010) reviewed several measurements of tax avoidance often applied in the literature, including total book-tax difference that is the dissimilarity on revenues before tax according to accounting and fiscal. It can support information on tax avoidance behaviour, but in the book-tax difference it is tricky to document because valid calculations are hard to achieve. Subsequent research developed tax avoidance measurements based on abnormal book-tax differences (Desai & Dharmapala, 2006, 2009; Lim et al., 2011).

Desai and Dharmapala (2006, 2009) developed measurements that measure abnormal book-tax differences by regression of the total book-tax difference with total accruals. To control the earnings management in accounting, total accumulations are projected. The remaining from the regression is used as a concept for the book-tax difference component caused by management related to tax purposes called tax income management. Based on the abnormal book-tax difference measurements developed by Desai and Dharmapala (2006, 2009), Lim et al. (2011) using discretionary accruals which were regressed with total book-tax difference. Discretionary accruals are a finer earnings management proxy using a formula from Dechow et al. (1995) and Khotari et al. (2005). Residuals from discretionary accrual regression with book-tax difference are the book-tax difference components affected by earnings management for tax aims.

2.2. Earnings Informativeness

A company's ability to report earnings provides information that is used as an important dimension of earnings quality. Companies that report earnings consider information content (Ball & Brown, 1968), which is called the Earnings Response Coefficient (ERC), a proxy for earnings quality. According to Collins and Khotari (1989), ERC is measured by the reaction of stock prices to expected earnings changes. Earnings informativeness is a crucial earnings quality dimension

since it illustrates reported earnings ability to assist shareholders in estimating a company's stock price, so profits reflect useful information for making decisions (Dechow et al., 2010).

Tax Risk Management

Tax risk management is about understanding where tax risks arise and determining how they are handled (PricewaterhouseCoopers, 2004). Corporate financial governance has been transformed due to the financial scandals in the United States and several other countries, hence rising awareness of the importance of risk management and internal control. Tax risk management is less of a major concern than risk management in general. It is often regarded as part of the area of risk management in general, rather than dealing with tax risk management separately from general risk management. Therefore, Wunder (2009) conducted a study with the objective to describe the state of tax risk management for multinational corporate by using a financial directors survey in the companies registered in the United States. The outcomes of his research is that there had been significant advances in multinational companies' development and implementation of both policies on general risk management and tax risk management. The results of this study show the tax risk management importance as a control over inherent tax risk.

The Effect of Tax Avoidance on Earnings Informativeness

Some studies continue to show mixed results on how investors assess tax avoidance efforts by companies. Desai and Dharmapala (2009) provide proof that implies tax avoidance has a positive value and is a function of corporate governance, especially for well-governed companies. In contrast, Kim, Li, and Zhang's (2011) research found that corporate tax avoidance is positively related to the risk of falling stock prices, a result which is consistent with the argument that tax avoidance can facilitate managerial rent extraction. Likewise, Hanlon and Slemrod's (2009) research found that corporate involvement in tax sheltering was considered as bad news by the capital market.

Balakrishnan et al. (2012) examined the potential problems of financial transparency related to aggressive tax planning. The results of their research show that tax avoidance can lead to obscurity in the company's overall financial reporting environment; this blurring can cause difficulties for shareholders in identifying the source and persistence of income and cash flow. Balakrishnan et al. do not directly observe the impact of earnings informativeness on tax avoidance, but it shows that the issue of transparency related to tax avoidance will have an impact on net income, which in turn will have an impact on earnings informativeness. Kubata et al. (2013) said a high level of tax avoidance leads to: (1) Decreased informativeness on the tax expense itself, which then reduces the informativeness of the net income residuals. Reported net income can indicate lower information content because of the combined effect of tax costs which are managed intricately; (2) Decreased informativeness on earnings on profit before tax. Tax avoidance strategies may be difficult in the consolidation process and can interfere with data traceability, thus group-level earnings before tax reported aggregately to investors ultimately become less useful for shareholders.

The research conducted by Kubata et al. (2013) shows that higher tax avoidance rates are connected to decreased earnings informativeness. The results of research by Kim et al. (2011), Hanlon and Slemrod (2009), Balakrishnan et al., (2012) and Kubata et al. (2013) show negative evaluations of market participants of tax avoidance efforts. Several previous studies have also shown that tax avoidance activities can hinder the shareholders ability to deduce the tax avoidance potential, and, vice versa, tax avoidance can encourage a lack of informativeness on before-tax

income. Therefore, this research's first hypothesis is that attempts at tax avoidance will decrease earnings informativeness:

H1: Tax avoidance negatively affects earnings informativeness.

Tax Risk Management Role in Earnings Informativeness

Tax risk management is more specific risk management of taxation, when risk vagueness in business typically indicates taxation. PricewaterhouseCoopers (2004) defines tax risk management as a comprehension of where the risk of tax occurs and determines the assessment of the handlings. Tax avoidance can decrease the level of earnings informativeness, and tax risk management is one form of internal controls carried out by companies to overcome the risks inherent in the field of taxation. When companies implement a more suitable tax risk management, they will reduce the undesirable effect of tax avoidance on earnings informativeness. The tax risk management application can increase transparency in a company's financial statement on taxation strategies taken, so as to reduce information blur, and allowing shareholders to identify sources, persistence of income and cash flow. Companies that implement tax risk management can gain shareholder trust in the informativeness of the pre-tax profits presented. The second hypothesis is tax risk management can lessen the negative impact from tax avoidance on earnings informativeness, in the sense that it can increase earnings informativeness.

H2: Tax risk management can lessen the negative impact of tax avoidance on earnings informativeness.

METHOD

Types and Data Sources

This research applies financial report data and annual reports of multinational parent companies in Indonesia and Malaysia over 2010 to 2016 with companies in these two countries because these two countries are developing countries in the ASEAN region, with similar company characteristics, so the company data examines can be compared.

Population and sample

The population of this research includes all industry multinational companies in Indonesia and Malaysia during the period 2010 to 2016. The sample is based on several criteria: 1) it excludes the financial and insurance sector because of the different accounting rules, operating characteristics and funding; 2) use of fiscal years ending on December 31 for uniformity of the bookkeeping period; 3) companies with a current tax burden as a proxy to measure book tax difference, and to confirm that they have no fiscal loss.

Research model and hypothesis formulation

This study uses two specification models to evaluate the hypotheses 1 and 2, where in model 1, hypothesis 1 is examined without adding a tax risk management variable, to analyze the tax avoidance impact on ERC, whereas in model 2, hypothesis 2 is examined by adding a tax risk management variable to analyze the tax risk management role as moderation variable in the relationship of tax avoidance and ERC. This research developed the model proposed by Kubata et al. (2013) and Wang (2006), as follows:

The model for testing hypothesis 1 is shown by β_2

$$\text{Ret it} = \beta_0 + \beta_1 \text{NIit} + \beta_2 \text{NIit} * \text{TAit} + \beta_3 \text{Growthit} * \text{NIit} + \beta_4 \text{Leverageit} * \text{NIit} + \beta_5 \text{WGIGOVit} * \text{NIit} + \beta_6 \text{WGIGOVit} * \text{NIit} + \beta_7 \text{GDPit} * \text{NIit} + \epsilon \text{it} (1)$$

The model for testing hypothesis 2 is shown by β_9

$$\text{Ret}_{it} = \beta_0 + \beta_1 \text{NI}_{it} + \beta_2 \text{NI}_{it} * \text{TA}_{it} + \beta_3 \text{TRM}_{it} * \text{NI}_{it} + \beta_4 \text{Growth}_{it} * \text{NI}_{it} + \beta_5 \text{Leverage}_{it} * \text{NI}_{it} + \beta_6 \text{WGIGOV}_{it} * \text{NI}_{it} + \beta_7 \text{WGIREG}_{it} * \text{NI}_{it} + \beta_8 \text{GDP}_{it} * \text{NI}_{it} + \beta_9 \text{TRM}_{it} * \text{TA}_{it} * \text{NI}_{it} + \varepsilon_{it} \quad (2)$$

Tax Avoidance and Earnings Informativeness (ERC):

Return t = Company return

NI = Net income for year t divided by market value equity lag

TA = Tax avoidance is an abnormal book-tax difference used in the study of Lim et al.(2011)

Moderation variable

TRM = The tax risk management uses the measurement of Masri, Syakhroza, Wardhani and Samingun (2019) by calculating the median standard deviation of annual cash ETRs over the previous five years. A dummy variable is used, given the value of 1 if the standard deviation is below the median standard deviation based on the industry sector.

Control Variable

GROWTH = Average growth rate of the company from net sales

LEVERAGE = Ratio of total debt to total assets

WGIGOV = The World Governance Index, from www.govindicators.org, that reflects the quality of public services, civil servants, level of independence from political pressure, and policies.

WGIREG = The World Governance Index, from www.govindicators.org, that reflects the perception of the government's ability to formulate and implement good policies and regulations that support and reassure the private sector development.

GDP = Gross Domestic Product of a country

3.4. Operational definition and measurement of variables

3.4.1. Independent Variable: Tax Avoidance

The measurement of tax avoidance used was that of Lim (2011), as follows:

$$\text{Total BTD}_{i,t} = \beta_0 + \beta_1 \text{DA}_{i,t} + \mu_i + \varepsilon_{i,t}$$

BTD = Book tax difference, the difference between accounting profit and fiscal profit

DA = Discretionary accrual, from the measurement of Khotari et al. (2005)

The residual from the regression is an earning component for tax management which shows tax avoidance:

$$\text{Ab_BTD}_{i,t} = \mu_i + \varepsilon_{i,t}$$

Dependent Variable : Earnings Response Coefficient

In general, the important dimension of earnings quality is a company's ability to report earnings and to provide information on decisions made, that is the issue of the former research. In particular, companies that report earnings are known to consider information content (Ball and Brown, 1968), in which the frequency of earnings response coefficients (ERS) is used as an earnings quality proxy. According to Collins and Kothari (1989) and Wang (2006), ERC is measured by the reaction of stock prices to expected earnings changes, with the following equation:

$$\text{Return}_{it} = \alpha_{0it} + \beta_1 \text{NI}_{it} + \varepsilon_{it}$$

Return t = Company return

NI = Net income for year t divided by market value equity lag

Moderation Variable: Tax Risk Management

The tax risk management measurement is based on the one by Masri et.al (2019), by calculating the median standard deviation of annual cash ETRs over the previous five years. Tax risk management uses a dummy variable, given the value of 1 if the standard deviation is below the median standard deviation based on the industry sector. The tax risk management measurement is based on the assumption that the company's standard deviation cash ETR is below the median value based on the industry sector, and the company is considered has properly carried out tax risk management.

RESULTS AND DISCUSSION

The multinational companies samples registered in Indonesia and Malaysia during the period 2010 to 2016 were 237 companies and 1659 firm-years. The measurement of the descriptive statistics is intended to facilitate observation by calculating the average value, median and standard deviation. The variables presented in Table 1 is the descriptive statistics. The tax avoidance variables show that the mean value is lower than the median value, which means in the model of these multinational companies, aggressive tax behaviour is rather widespread. Standard deviation of tax avoidance in Indonesian multinational companies is greater than the standard deviation of tax avoidance in Malaysian multinational companies, this shows that the varians of tax avoidance practices in Indonesian multinational companies is much greater than Malaysia. The return value and net income show that the median value is lower than the mean value, meaning the rate of return and net income in the company's relatively smaller. Companies that implement tax risk management constituted 49.54% of the total sample. Where for the sample of Indonesian multinational companies around 40% while Malaysian multinational companies ranged 53%, which means tax risk management in Malaysian multinational companies is better than Indonesia.

Table 1. Descriptive Statistics

	N	Indonesia			Malaysia			Total		
		Mean	Median	Standev	Mean	Median	Standev	Mean	Median	Standev
TA_Lim	1659	0.000	0.008	0.389	0.000	0.000	0.065	0.000	0.001	0.203
TRM	1659	0.404	0.000	0.491	0.526	1.000	0.499	0.495	0.000	0.500
Return t	1659	0.162	0.017	0.620	0.116	0.035	0.424	0.128	0.030	0.481
NI t	1659	118.71	54.12	3178.68	90.95	86.33	193.24	97.98	77.12	1606.69

The correlation analysis between variables is shown in table 2. The correlation test results indicate that the return and net income are significantly positively correlated with tax avoidance, which means that companies that practise tax avoidance tend to increase their net income and return. Net income is also significantly positively correlated with the companies' return. This means the greater the net income is, the greater the rate of return will be.

Table 2. Correlation

	TA_Lim	TRM	RETURN	NI
TA_Lim	1	.042	.224**	.237**
TRM	.042	1	.007	.021
RETURN	.224**	.007	1	.230**
NI	.237**	.021	.230**	1

**Correlation is significant at the 0.01 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed).

Regression results

Table 3 : The Effect of Tax Avoidance on ERC

$$Ret_{it} = \beta_0 + \beta_1 NI_{it} + \beta_2 NI_{it} * TA_{it} + \beta_3 Growth_{it} * NI_{it} + \beta_4 Leverage_{it} * NI_{it} + \beta_5 WGIGOV_{it} * NI_{it} + \beta_6 WGIGOV_{it} * NI_{it} + \beta_7 GDP_{it} * NI_{it} + \epsilon_{it}$$

Variable	Hypothesis	TA_Lim		Explanation
		Coefficient	Prob.	
C		0.0523690	0.00000	
NI	+	-0.0012710	0.03017**	Not in line with previous research
TA*NI	H1-	-0.0000959	0.15580	H1 =rejected, not significant
GROWTH*NI	+	0.0000001	0.23847	Not significant
LEV*NI	-	-0.0000206	0.11512	Not significant
WGIGOV*NI	+	0.0000570	0.00000***	In line with previous research
WGIREG*NI	+	-0.0000314	0.00007***	Not in line with previous research
GDP*NI	+/-	0.0000001	0.37600	Not significant
R-squared			0.27895	
Prob(F-statistic)			0.00000***	

Figures in parentheses are the p-values of the t-statistics and f-statistics, where *** denotes significant at the 1% level; **significant at the 5% level, and *significant at the 10%level.

This study uses panel data. Based on the results of the Chow Test and the Hausman Test, the best data processing is the common effect model. GLS weight treatment (cross-section weight) is performed to overcome the problem of heteroskedacity. The GLS model is free from classical assumptions (Gujarati, 2004).The results in table 3 show the effect of tax avoidance on ERC with the F-statistic significant at thelevel of 1% and an R square of 27.89%. Testing of hypothesis 1 shows that tax avoidance has a negative effect, with p-value of the t-statistic of 0.15580 being greater than 0.05, meaning it does not have anysignificant effect on earnings informativeness. From the result, hypothesis 1 is rejected. The research results on tax avoidance show a negative direction, in accordance with the direction of the research hypothesis, which means that tax avoidance can reduce the level of earnings informativeness,although with a confidence level of only 85%. From the control variable,which shows a significant influence and is in accordance with previous research, WGIGov has positive significance at the level of 1%, making it evident that world governance related to government effectiveness can increase earnings informativeness.

Table 4 shows the tax risk management effect on tax avoidance in relation to earnings informativeness (ERC). The probability of the f-statistic results shows a significance level of 1% with an R square of 44%. Testing of hypothesis 2 shows that moderating tax risk management with tax avoidance has a positive effect on ERC, with a significance level of 1%, so hypothesis 2 can be accepted. The study results prove that tax risk management can lessen the negative impact of tax avoidance on ERC, in this regard that a company which practises better tax risk management will reduce the negative impact of tax avoidance on ERC. Therefore, tax avoidance impact moderated by tax risk management will increase ERC.

Table4: Moderation of TRM with Tax Avoidance in relation to ERC

$$Ret_{it} = \beta_0 + \beta_1 NI_{it} + \beta_2 NI_{it} * TA_{it} + \beta_3 TRMit * NI_{it} + \beta_4 Growth_{it} * NI_{it} + \beta_5 Leverage_{it} * NI_{it} + \beta_6 WGIGOV_{it} * NI_{it} + \beta_7 WGIREG_{it} * NI_{it} + \beta_8 GDP_{it} * NI_{it} + \beta_9 TRMit * TA_{it} * NI_{it} + \epsilon_{it}$$

Variable	Hypothesis	TA_Lim		Explanation
		Coefficient	Prob.	
C		0.0555230	0.00000	
NI	+	-0.0012550	0.01117**	Not in line with previous research
TA*NI	-	-0.0000563	0.10007*	In line with previous research
TRM*NI	+	0.0001260	0.00252***	Significant, in accordance with the direction of this research
GROWTH*NI	+	-0.0000091	0.00005***	Not in line with previous research
LEV*NI	-	-0.0000143	0.14182	Not significant
WGIGOV*NI	+	0.0000547	0.00000***	In line with previous research
WGIREG*NI	+	-0.0000314	0.00000***	Not in line with previous research
GDP*NI	+/-	0.0000002	0.27375	Not significant
TA*NI*TRM	H2+	0.0005340	0.00007***	H2= Accepted
R-squared			0.44227	
Prob(F-statistic)			0.00000***	

The figures in parentheses are the p-values of the t-statistics and f-statistics, with*** denoting significant at the level of 1%; **significant at the level of 5%, and *significant at the level of 10%.

RESULTS AND DISCUSSION

The research objective is to examine the tax avoidance impact on earnings informativeness, and the tax risk management role between tax avoidance and earnings informativeness. It has not been possible to prove hypothesis 1, that tax avoidance can decrease the level of earnings informativeness. The results show that tax avoidance has a negative effect on earnings informativeness, with a confidence level of 85%; the low level of trust indicates the low significance of the relationship. The results of the testing of hypothesis 1 show that tax avoidance does not significantly affect the earnings informativeness of multinational companies in Indonesia and Malaysia. However, the results of the testing of hypothesis 2 have successfully proven that tax risk management can decrease the tax avoidance negative impact on earnings informativeness. This research contributes to showed that moderating tax risk management with tax avoidance has a positive effect on earnings informativeness. Tax risk management is an internal control over the tax risk inherent in aggressive tax behaviour, which is indicated by the tax avoidance carried out by companies, so tax risk management may decrease the tax avoidance negative impact. Companies that implement better tax risk management will decrease the negative effect on earnings informativeness. The application of tax risk management can increase transparency in companies' financial statements on taxation strategies taken, therefore reducing information blur, and allowing shareholders to identify sources, persistence of income and cash flow. Companies that implement tax risk management can gain shareholders' trust in the informativeness of the pre-tax income presented.

CONCLUSION

The research aim is to analyze the tax risk management role in the relationship between tax avoidance and earnings informativeness (ERC) in multinational companies registered in Indonesia and Malaysia by the period 2010 to 2016. The hypothesis 1 test result shows that tax avoidance significantly influences earnings informativeness negatively with a confidence level of 85%. The weak level of significance indicates that tax avoidance does not significantly affect the earnings informativeness level. On the other hand, hypothesis 2 testing shows that the moderation of tax avoidance by tax risk management has a positive effect on earnings informativeness with a significance level of 1%, which means that tax risk management can lessen the negative influence

of tax avoidance on earnings informativeness. Companies with better practice on tax risk management can raise the pre-tax income transparency presented, so they can raise earnings informativeness (ERC).

This research could have implications for company management regarding the implementing tax risk management significance to decrease the negative influence of tax avoidance, while the tax avoidance strategies implemented by companies can direct to a decrease in the pre-tax income company reports transparency, thereby reducing earnings informativeness. The application of tax risk management serves as an internal control to decrease the tax avoidance inherent risk, as well as to increase the transparency of the pre-tax income reports presented so that decision making information can be provided to shareholders. The research also supports the application of tax risk management in aggressive tax behaviour carried out by companies and its impact on earnings informativeness, so supplements the research literature on taxation.

Based on descriptive statistical data, the level of tax risk management in Malaysian MNCs is higher than Indonesia, namely Malaysia 53% while Indonesia is 40%, which shows that the tax risk management application in Malaysian MNCs is better than Indonesian. In contrast, the variance in tax avoidance practices in Indonesian multinational companies tends to be higher than Malaysian. Based on the comparison of the results of the two countries can have implications, especially for tax regulators in Indonesia in order to be able to conduct comparative studies in neighboring countries, for the role of supervision by regulators so as to suppress tax avoidance practices, especially those carried out by multinational companies in Indonesia

The research uses only one proxy for of tax avoidance measurement developed by Lim et al. (2011). In the development of research related to tax avoidance there are several other measurements of tax avoidance that can be used. In further research, the research construct test could be used with other aggressive tax behaviour measurements, which could better capture aggressive tax behaviour by companies.

REFERENCES

- Assidi, S., (2015). Tax risk and stock return volatility: case study for French Firms. *Int. J. Business Continuity and Risk Management*, 6,(2), 137-146.
- Atwood, T.J., & Lewellen, C., (2017). The Complementarity Between Tax Avoidance and Manager Diversion: Evidence from Tax Haven Firm. Working paper, North Carolina State University.
- Balakrishnan, K., Blouin, J., Guay, W. (2012). Does Tax Aggressiveness Reduce Corporate Transparency? Working Paper, University of Pennsylvania.
- Ball, R., & Brown, P. (1968). An Empirical Evaluation of Accounting Income Numbers, *Journal of Accounting Research* 6(2), 159-178.
- Chen, S., Chen, X., Cheng, Q., Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms?. *Journal of Financial Economics*, 95, 41–61.
- Collins, D., & Kothari, S.P. (1989). An analysis of intertemporal and cross-sectional determinants of earnings response coefficients, *Journal of Accounting and Economics*, 11(1), 143-181.
- Dechow, P., Sloan, R., Sweeney, A., (1995). Detecting earnings management. *The Accounting Review*, 70, 193–225.
- Dechow, P., Ge, W., Schrand, C. (2010). Understanding Earnings Quality: A review of the proxies, their determinants and their consequences, *Journal of Accounting and Economics*, 50(2-3), 344-401
- Desai, M.A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, 79, 145-179.
- Desai, M.A., & Dharmapala, D. (2009). Corporate tax avoidance and firm value. *The Review of Economics and Statistics*, 91(3), 537-546.
- Gujarati, D. N. (2004). *Basic Econometrics*. (4th ed). New York: McGraw-Hill Companies.
- Hanlon, M., & Slemrod, J. (2009). What does tax aggressiveness signal? Evidence from stock price reactions to news about tax shelter involvement, *Journal of Public Economics*, 93(1-2), 126-141.

- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economic*, 50, 127-178.
- Kim, J.B., Li, Y., Zhang, L. (2011). Corporate tax avoidance and stock price crash risk: Firm-level analysis, *Journal of Financial Economics*, 100(3), 639-662.
- Kothari, S.P., Leone, A.J., Wasley, C.E. (2005). Performance Matched Discretionary Accrual Measures. *Journal of Accounting and Economics*, 39, 163-197.
- Kubata, A., Lietz G., Watrin G. (2013). Does Corporate Tax Avoidance Impair Earnings Informativeness?. Working Paper. Munster School of Business and Economics Institute of Accounting and Taxation. www.ssrn.com
- Lim, Y.D. (2011). Tax avoidance, cost of debt and shareholder activism: Evidence from Korea. *Journal of Banking & Finance*, 35, 456-470.
- Masri, I., Syakhroza, A., Wardhani, R., & Samingun (2019). The role of tax risk management in international tax avoidance practices: Evidence from Indonesia and Malaysia. *International Journal of Trade and Global Markets*, 12(3-4), 311-322.
- Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management?. *Journal of Corporate Finance*, 16(10), 703-718.
- PricewaterhouseCoopers. (2004). *Tax risk management*. London: PWC
- Scholes, M., Wolfson, M., Erickson, M., Maydew, E., Shevlin, T. (2009). *Taxes and Business Strategy: A Planning Approach*, 4 Ed., Upper Saddle River, NJ: Prentice-Hall Inc.
- Slemrod, J., & Yitzhaki, S., (2002). Tax avoidance, evasion, and administration. In: Auerbach, A., Feldstein, M. (Eds.), *Handbook of Public Economics*, vol. 3. Elsevier Science, Amsterdam, pp. 1423-1470.
- Slemrod, J., (2004). The economics of corporate tax selfishness. *National Tax Journal*, 57, 877-899.
- Spence, M. (1974). Job Market Signaling. *The Quarterly Journal of Economic*, 87(3) (Aug., 1973), 355-374.
- Wagener, T., & Watrin, C. (2013). Do Multinational Firms Use Complex Group Structures to Facilitate Income Shifting and Repatriation? Working Paper, University of Münster
- Wang, S., & D'Souza, J. (2006). Earnings management: The effect of accounting flexibility on R&D investment choices. Working paper, Cornell University. www.ssrn.com
- Wunder, H. F. (2009). Tax Risk Management and The Multinational Enterprise. *Journal of International Accounting, Auditing and Taxation*, 18 (2009), 14-28.
- Zimmerman, J. (1983). Taxes and firm size, *Journal of Accounting and Economics*, 5(1), 119-149.