

# Effect of International Financial Reporting Standards on Firm Performance and Components of Leverage

Challoner A. Matero<sup>1</sup>, Hsien-Li Lee<sup>2</sup>

<sup>1</sup>Accountancy Department, University of San Carlos University, School of Business and Economics, Republic of the Philippines

<sup>2</sup>Department of Accounting, Chung Yuan Christian University, College of Business, Republic of China

DOI: <https://dx.doi.org/10.47772/IJRISS.2024.801090>

Received: 31 December 2023; Accepted: 06 January 2024; Published: 07 February 2024

## ABSTRACT

This study examines the effect of International Financial Reporting Standards on key firm performance in Taiwanese-listed firms using the sample period from 2012 to 2017. This study hypothesizes that the standards significantly affect firm performance. The outcomes of the study support the hypothesis that the standards are positively associated with the measures of profitability at a significant level. Secondly, the hypothesis on a negative effect of the standards on Price-Earnings Ratio and Debt-Equity Ratio. Thirdly, the hypotheses that the standards have a positive effect on Current Ratio and Equity Ratio have no support. The non-current component of leverage tends to hold a relationship with other variables in the same degree as the leverage does.

**Keywords:** International financial reporting standards; IFRS; Financial ratios

## INTRODUCTION

The International Financial Reporting Standards (IFRS) advance a uniform construction of general-purpose financial statements for easy readability for diverse stakeholders in decision-making [12]. The IFRS is expressed on principles that offer no detailed guides for implementation. Consequently, it allows greater flexibility in the choice of accounting methods [3]. The financial ratios and the underlying changes in financial statement items offer analysts comprehensive information compared to the aggregated numbers [14]. They are useful for intracompany as well as intercompany comparisons. The profitability ratios assess the ability of the firm to generate profits from operations. The financial leverage conveys the degree of financing sourced from the debtors and shareholders and the claims on the firm. The liquidity ratios convey the ability of the firm to pay obligations with readily available cash. The effect of IFRS on financial ratios is significant ([14],[17]. References [2] and [6] find that IFRS implementation is positively linked with tax avoidance and book-tax aggressiveness.

We do not know any studies in the English language that examine the effect of IFRS on firm performance using key financial ratios in the Taiwan setting. To address the gap, we investigate the effect of IFRS on firm performance using financial ratios in Taiwanese-listed firms from 2012 to 2017. This study in a country maintains the legal origin, the degree of law implementation, accounting disclosure, and recognition rules across the exchange-listed firms. Taking into consideration the dynamics in the Taiwan Stock Exchange (TSE) market, agency problems, market players, and financial and tax reporting environment, this research on Taiwan firms as a recent adopter of IFRS, as an emerging market, and the market's emphasis on raising overseas capital is relevant.

This study hypothesizes that IFRS in Taiwanese-listed firms significantly affects firm performance. The income is expected to increase, and so do the profitability and equity ratios. However, an expected higher

income might cause the Price-Earnings Ratio to decline; and a growing equity ratio might affect the Debt-Equity Ratio downward. The expected higher income might favorably impact the Current Ratio. The findings of the study document that the IFRS tends to raise profits. Thus, hypotheses 5, 6, and 7 are supported. Secondly, the IFRS is negatively related to the Price-Earnings Ratio (PE) and Debt-Equity (DER) supporting hypotheses 2 and 4. Thirdly, the IFRS has no relation with the Current Ratio (CR) and Equity Ratio (ER). Hypotheses 1 and 3 are not supported. The total debts (LEV) impact CR and the profitability ratios. Additional analysis using current and non-current liabilities in replacement LEV. The non-current liability portion tends to hold a relationship with variables to the same degree as LEV does, thus, may be used as a substitute for LEV in this study.

The results of this study offer financial analysts, users and advocates of IFRS, accounting regulators, researchers, and academia new evidence of the usefulness of key financial ratios to investigate the effect of IFRS. Moreover, the results of this study would be of great interest of the local and foreign investors with evidence of the changes in leverage and equity, the opportunity cost of leverage-related tax shield, and the higher profits after the adoption of IFRS. The results of this study contribute to the literature by using data from an emerging market, use of seven key financial ratios from previous studies for comparability, the usefulness of financial ratios as measures of firm performance, impact of IFRS on financial ratios, and the role of current and non-current liabilities as control variables in the study of the effects of IFRS. This study limits the study period from 2012 to 2017 for two reasons. This study isolates the effect of the tax rate cut implemented in 2010 and any spills over in 2011; and the effect of increased corporate income tax rates implemented in 2018. Further studies may consider the impact of IFRS by industries, firm size, and use of other variables, or expand the study related to taxation.

The organization of this paper starts with Section 2 on a brief literature review on IFRS and financial ratios and then Section 3 covers the research method. The results and the discussion are contained in Section 4 and Section 5 completes with a conclusion.

## RELATED LITERATURE

### Background

Results of studies on the impact of IFRS on financial ratios offer insights into the changes in financial ratios after the IFRS. Reference [14] focuses on Finnish firms as representatives of a creditor-oriented code law regime. In contrast, [14] tests United Kingdom (U.K.) firms as representative of a shareholder-oriented common law regime. Reference [14] hypothesizes that U.K. firms might not show a significant effect after IFRS with an assumption that both the shareholder-oriented common law regime and the IFRS provide information related to capital market participants. However, [14] documents that IFRS significantly affects financial ratios, consistent with the result of the study on Finnish firms under a creditor-oriented code law regime. The findings of [14] suggest that IFRS has a substantial influence on financial ratios regardless of law regimes. Likewise, the finding supports the opinions of [5] and [16] against accounting differences primarily due to the law regime.

Consequently, this study tests the effect of IFRS on firm performance using financial ratios as indicators in a recent adopter of IFRS. The IFRS promotes a uniform construction of general-purpose financial statements to serve as an easier basis for economic decisions [12] for firms to benefit from the international markets. It is expressed on principles [18] and offers no detailed guides for implementation, consequently, allowing greater flexibility in the choice of accounting methods [3].

On the other hand, the IFRS and standards for local and tax accounting of a country have independent objectives that likely differ [2], [3] and may offer opportunities for flexibility. The study by [2] using an international sample from 1999 to 2014 finds that IFRS is linked with greater levels of corporate tax

avoidance from both accruals and non-accruals. Moreover, [6] uses a sample from the Association of Southeast Asian Nations countries and finds that IFRS positively impacts the book-tax aggressiveness practice while law enforcement deters the practice.

The financial ratios are analysis of the firm performance useful for intracompany as well as intercompany comparison. Financial ratios and the variations in financial statement items offer comprehensive information for investment decisions in contrast to the aggregated numbers [14]. The profitability ratios evaluate the ability to generate profits from operations. The financial leverage conveys the degree of financing sourced from the debtors and shareholders and the claims on the firm. The liquidity ratios convey the ability of the firm to pay obligations with readily available cash. A number of studies in Taiwan uses financial ratios. Reference [4] proposes an upgrade of productivity, [13] proposes a credit evaluation model, and [15] in bankruptcy prediction.

Results of studies on the consequence of IFRS report variations results. Reference [20] examines the financial reporting quality in Taiwan firms and documents less earnings smoothing, and [23] concludes the deterioration of corporate efficiency of Taiwanese firms after IFRS. The financial ratios and financial statement accounts were statistically significant among Turkish firms [21]. However, [1] finds insignificant results on the impact of the IFRS and suggests further research on the outcomes of IFRS on financial statement items and ratios. While [8] finds significant growth in liabilities, lower equity, and variations in earnings after IFRS, [7] present an increase in financial items after IFRS. Reference [14] shows that the volatile increases in income statement values after IFRS. Reference [17] finds that IFRS significantly increases profitability and gearing ratios; and decreases price-earnings and equity ratios. The change in profitability and price-earnings ratios are driven by increases in profits while the gearing and lower equity ratios are driven by a decrease in equity and an increase in debt. However, the change in the current ratio is not significant. Using the Financial Times Stock Exchange 250 companies as a sample of U.K. firms, [17] found that operating profit margin (OPM), return on equity (ROE), return on invested capital (ROIC), and CR increased significantly while the Price-Earnings Ratio decreased. This study differs from the studies by [12] and [14] in seven areas:

(1) Difference in the year of adoption of IFRS.

References [14] and [17] use data of European firms after the adoption of IFRS in 2005 while this study of Taiwanese-listed firms complied with the mandatory adoption of IFRS in 2013.

(2) The financial reporting standards used in the construction of the financial data.

References [14] and [17] use financial ratios constructed under two different accounting standards, IFRS and U.K. GAAP [17]; and the IFRS and Finnish Accounting Standards [14]. This study uses data from 2013 to 2017 under the IFRS.

(3) The financial data.

Reference [17] uses ratios as of January 2005 while [14] use year reports when firms converted to IFRS, 85 firms in 2004 records, 5 firms in 2003, and 1 firm in 2002. This study uses data from 2012 to 2017.

(4) The method of test.

The studies by [14] and [17] use the Wilcoxon signed-ranks test to determine the statistical difference of the median of financial ratios. This study uses Ordinary Least Squares to test a regression model.

(5) Financial ratios used in the study.

The studies by [17], [14], and this study use CR, PE, OPM, ROE, and ROIC. However, [14] and this study use two more ratios, the ER and DER.

#### (6) Study period.

Reference [17] uses ratios as of January 2005 while [14] uses year reports when firms converted to IFRS, namely 2004, 2003, and 2002. This study uses data from 2012 to 2017.

#### (7) Sample size.

Reference [14] have 91 firms and [17] have 101 firms. This study has a sample size of 4,847 firms.

### Hypotheses

Taiwan implemented mandatorily the adoption of IFRS in listed firms in 2013 [22]. Consequently, this study postulates that IFRS significantly affects the firm performance of Taiwanese-listed firms. The income is expected to increase, and accordingly, so do the profitability and equity ratios. A higher income might favorably impact the Current Ratio but might cause the Price-Earnings Ratio to decline. A rising equity ratio might affect the Debt-Equity Ratio downward. Using the Taiwan data sample from 2010 to 2017, [22] tests the association between corporate performance and related-party transactions. They use operating expense, liability, and stockholders' equity as input variables and revenue and market value as output variables in epsilon-based measures for data envelopment analysis to determine the corporate efficiency scores at the first stage of the study. The authors do not know any previous studies in the English language that tackle the effect of IFRS using financial ratios as a proxy for the firm performance of Taiwanese-listed firms. Therefore, the effect of IFRS on the firm performance of Taiwanese-listed firms is an empirical question. The hypotheses for this study are as follows:

H1: The Current Ratio is positively connected to IFRS adoption.

H2: The Price-Earnings Ratio is negatively linked to the IFRS adoption. H3:

The Equity Ratio is positively associated with IFRS adoption.

H4: The Debt-Equity Ratio is negatively allied to IFRS adoption.

H5: The Operating Profit Margin is positively connected to the IFRS adoption. H6:

The Return on Equity is positively associated with the IFRS adoption.

H7: The Return on Invested Capital is positively related to the IFRS adoption.

## RESEARCH METHOD

### Measure of performance

To test the hypotheses on the effect of IFRS on firm performance, this study uses Equation (1):

$$Y = \alpha + \beta_1 \text{IFRS} + \beta_2 \text{SIZE} + \beta_3 \text{LEV} + \varepsilon \quad (1)$$

where: Y measures the firm performance and alternatively takes the variable CR, PE, ER, DER, OPM, ROE, and ROIC.

The independent variables are IFRS, SIZE, and LEV and  $\varepsilon$  is an error term. The IFRS is a dummy variable that takes a value of one if the firm uses the IFRS; and zero if otherwise. References [9] and [2] use size as a natural log of total assets and leverage as control variables in their studies of the effect of IFRS. Reference [2] finds a significant relationship between IFRS and size as negative; and between IFRS and leverage as positive. On the other hand, [9] finds a positive and significant relationship between IFRS, size, and leverage. This study controls for the year-fixed effect on firm performance using dummy variables.

To contribute to the discussion and comparability across studies on the effect of IFRS on firm performance using financial ratios, this study uses the seven ratios used by [14] to evaluate the liquidity, financial leverage, and profitability of the firms. Reference [17] uses the OPM, ROE, ROIC, CR, and PE. Table 1 lists the variables and definitions used in this study.

TABLE I

DESCRIPTION OF THE VARIABLES AND DEFINITIONS

Variable	Definition
CR	Indicates as the Current Ratio calculated as Current assets divided by Current liabilities
PE	Signifies the Price-Earnings Ratio. It is calculated as the market value of common shares over the Net income after Preferred dividends per share.
ER	Denotes to the Equity Ratio. It is computed as Equity over the Total assets.
DER	Denotes to Debt-Equity Ratio. It is derived as Total Debt over Equity.
OPM	Defines as Operating Profit Margin. It is the result of Net Operating Income over the Total Operating Revenue.
ROE	Denotes to Return on Equity. It is computed as Net Income over the Total Shareholders' Equity.
ROIC	Refers to Return on Invested Capital. It is derived as Net income after dividends over the Total assets.
IFRS	Is a dummy variable that takes the value of one when the firm adopted IFRS; zero if otherwise.
SIZE	Measured as the natural log of total assets of the firm.
LEV	Measured as the Total debts to total assets.
CL	Measured as the current liabilities component of LEV
NCL	Measured as the non-current liabilities component of LEV
YR	Is a dummy variable used to control the year-fixed effects.

**Research subject**

This study selects Taiwan because it mandatorily adopts IFRS in 2013 [18], thus, the Taiwanese-listed firms offer a conducive research subject for this study. The TSE shareholders endure inadequate shareholder protection while the Taiwanese firms remain weak in corporate governance [10]. Secondly, the institutional investors and the local individual investors in Taiwanese firms are unable to restrain management's interest [10]. The IFRS provides no detailed guides for implementation, consequently, allowing management greater flexibility in the choice of accounting methods [3]. Consequently, this study investigates the effect of

IFRS on the firm performance of Taiwanese-listed firms for the period from 2012 to 2017.

This study on one country safeguards recognized factors such as economic status, legal origin, law administration, accounting disclosure and recognition policies, financial reporting under IFRs, and local generally accepted accounting principles for tax reporting. Taiwan uses a law regime of German origin [19], the code law regime [17]. A law regime does not affect accounting as documented by the results of the effect of IFRS on the key financial ratios by [17] and [14].

### Selection criteria of sample

The sample restricts the annual sample based on the sample selection criteria from [17]. This study gathers data from the Taiwan Economic Journal database for all Taiwanese firms and uses EViews to run the tests. The total number of firms under the TSE market account for 5,279 for the period from 2012 to 2017. However, firms with unconsolidated financial reports (301) and financial firms (131) were excluded from the sample. The annual sample collected is 759, 780, 803, 820, 835, and 850 firms representing 91%, 91%, 91%, 92%, 92%, and 95% from 2012 to 2017, respectively. A total sample of 4,847 firms represents 92% of the total population.

## RESULTS AND DISCUSSION

### Descriptive statistics

Table 2 presents the descriptive statistics of the variables used in the study. The mean value of CR, PE, DER, ROE, and LEV is higher than the median indicating that the scores in a variable contain large values.

TABLE 2

#### DESCRIPTIVE STATISTICS

Variable	Mean	Median	Max	Min	Skewness	Kurtosis
CR	259	185	18,176	15	26	955
PE	81	13	206,910	0	62	3,811
ER	58	58	99	3	(0)	3
DER	46	30	783	0	5	41
OPM	9	7	135	(500)	(15)	634
ROE	12	9	153	(28)	3	31
ROIC	2	1	63	(30)	4	61
IFRS	1	1	10	0	2	89
SIZE	16	16	22	13	1	4
LEV	22.3 mil	3.5 mil	2,240 mil	17	12	221

\*, \*\*, \*\*\* denotes significance at the  $p < 0.10, 0.05, 0.01$  level

Max = Maximum; Min=Minimum

Table 3 displays the Pearson Correlation in the upper portion and the Spearman Rank Correlation in the lower portion. Multicollinearity is not a serious issue because no correlation is extremely high.

TABLE 3

CORRELATION

Variable	CR	PE	ER	DER	OPM	ROE	ROIC	IFRS	SIZE
CR	1.0	(0.0)	0.3	(0.2)	(0.0)	(0.0)	0.0	(0.0)	(0.2)
PE	0.1	1.0	0.0	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
ER	0.8	0.2	1.0	(0.7)	0.1	(0.0)	0.1	(0.0)	(0.4)
DER	(0.6)	(0.1)	(0.8)	1.0	0.0	0.0	(0.1)	0.0	0.3
OPM	0.2	(0.3)	0.2	(0.1)	1.0	0.4	0.3	0.0	0.0
ROE	0.0	(0.5)	0.0	(0.1)	0.6	1.0	0.7	0.0	0.1
ROIC	0.1	(0.5)	0.1	(0.1)	0.5	0.7	1.0	0.1	0.0
IFRS	0.0	(0.1)	0.0	0.0	0.0	0.0	(0.0)	1.0	(0.0)
SIZE	(0.4)	(0.2)	(0.4)	0.4	(0.0)	0.1	0.0	0.0	1.0
LEV	(0.6)	(0.2)	(0.7)	0.6	(0.1)	0.0	(0.0)	(0.0)	1.0

**Results of the test on the effect of IFRS on firm performance**

Table 4 displays the results of the test on the effect of IFRS on firm performance using Equation (1). The results of the test are plentiful. The first finding is that the IFRS is significant consistent with [17], and positively associated with the measures of profitability indicating that the IFRS tends to raise profits. This result is consistent with the findings of [14] and [17]. The results suggest that IFRS is associated with greater flexibility in the accounting methods as stated by [3]; likely on the recognition of expenses (not leverage-related) and revenue. This leads to increased income consistent with the findings of [8] and [11]. Hypotheses 5, 6, and 7 are supported.

A positive effect of IFRS on income would dampens the PE, thus, the second finding is that the IFRS is negatively related to PE supporting hypothesis 2. The result on lower PE is consistent with the findings of [14] and [17].

The third finding is that the IFRS has no relation with ER, thus, hypothesis 3 is not supported. The result of ER is inconsistent with the findings of [14]. Although ER is positive and insignificantly associated with IFRS, ER is discussed with the impact of IFRS on DER.

The fourth finding is that the IFRS is negatively related to DER supporting hypothesis 4. A decreased DER may be caused by changes in debts and equity where the end value of equity is higher than the debt. The finding suggests that IFRS tends to lessen the leverage of the firm, accordingly, rejects the benefit of the tax shield of an interest expense from using leverage. The result is inconsistent with the findings of [14].

The fifth finding is that the IFRS has no relation with CR. Hypothesis 1 is not supported. The result on CR is consistent with the findings of [14] but inconsistent with the result of [17].

Analysis on the relationship between IFRS and the control variables, SIZE and LEV, follows. The sixth finding is a positive and significant relationship between SIZE and IFRS under the profitability ratios suggesting that the OPM, ROE, and ROIC of large firms tend to be higher after the IFRS. The IFRS likely offers opportunities for the growth of profit. The positive relationship between SIZE and IFRS is consistent with the result documented by [8].

Further, the link between a positive SIZE and a negative IFRS is significant under DER suggesting that

specifically the DER of large firms is negatively affected by IFRS. The IFRS likely diminishes the DER of large firms. A decreased DER may be caused by changes in debts and equity where the end value of equity is higher than the debt. The result of a negative relationship between SIZE and IFRS is consistent with the finding of [2].

The eight finding is that LEV is negatively and significantly associated with IFRS under the profitability ratios suggesting that higher profitability ratios of low-leveraged firms. This result tends to collaborate with the negative and significant effect of IFRS on DER. The negative affiliation between LEV and IFRS is inconsistent with the positive findings of [2] and [9].

A profile of the affected firms can be drawn from the analysis of the result in Table 4. Large firms with low leverage generate higher profits after IFRS.

TABLE 4

FIRM PERFORMANCE AFTER IFRS

	CR	PE	ER	DER	OPM	ROE	ROIC
C	1,758	1,610	123	(38)	(92)	(70)	(33)
	15 ***	2 **	37 ***	(1)	(10) ***	(10) ***	(10) ***
IFRS	3	(380)	1	(33)	1	5	2
	0	(2) *	1	(2) **	0 ***	3 ***	2 *
SIZE	(93)	(75)	(4)	8	6	5	2
	(13) ***	(2)	(20) ***	3 ***	10 ***	11 ***	10 ***
LEV	0	(6)	(0)	0	(0)	(0)	(0)
	6 ***	(0)	(5) ***	1	(4) ***	(4) ***	(4) ***
YR effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.04	0.00	0.13	0.00	0.02	0.03	0.02

\*, \*\*, \*\*\* denotes significance at the p<0.10, 0.05, 0.01 level

Additional analysis of the data using current and non-current liabilities is performed to determine whether the different components of LEV hold a relationship with the other variables. Table 5 displays the outcomes of the test on the effect of IFRS on firm performance using CL and NCL as replacements for the variable LEV. The results of the estimation presented in Table 5 are consistent with many of the signs and significance previously presented in Table 4. However, three differences are noted. First, the IFRS has a negative and significant relationship with PE in Table 4 but there is no relationship in Table 5. Second, LEV is positively significant under CR in Table 4 but the CL turns insignificant and the NCL maintains the positive



significance in Table 5. Third, LEV is negatively associated with IFRS under the profitability ratios in Table 4 but both the CL and NCL are negatively related to IFRS in Table 5.

The similarities and differences between the results in Tables 4 and 5 reveal that LEV impacts CR and the three profitability ratios. However, when LEV is segregated into CL and NCL components, the NCL tends to hold a relationship with variables to the same degree as LEV does, thus, NCL may be used as a substitute of LEV in this study.

TABLE 5

FIRM PERFORMANCE USING COMPONENTS OF LEVERAGE

	CR	PE	ER	DER	OPM	ROE	ROIC
C	1,807	1,571	123	(41)	(92)	(71)	(33)
	15	2.00	37	(1)	(10)	(10)	(10)
	***	**	***		***	***	***
IFRS	(11)	(297)	0	(29)	2	5	2
	(0)	(1)	0	(2)	1	3	2
			**	***	***	***	**
SIZE	(96)	(77)	(4)	8	6	4	2
	(13)		(20)	2	10	11	10
	***	(2)	***	***	***	***	***
CL	0	0	(0)	0	(0)	(0)	(0)
	2	0	(2)	0	(3)	(3)	(3)
			**		***	***	***
NCL	0	0	(0)	0	(0)	(0)	(0)
	7		(4)			(3)	(3)
	***	0	***	0	(2)***	***	***
YR effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.04	0.00	0.13	0.00	0.02	0.03	0.02

\*, \*\*, \*\*\* denotes significance at the p<0.10, 0.05, 0.01 level

Numbers below the coefficient are asymptotic t-values.

**CONCLUSION AND FUTURE DIRECTIONS**

This study examines whether IFRS affects the firm performance of Taiwanese-listed firms using a sample period from 2012 to 2017. This study hypothesizes that IFRS in Taiwanese-listed firms significantly affects firm performance. This study documents that the IFRS is positively and significantly associated with the

measures of profitability indicating that the IFRS tends to raise profits. Thus, hypotheses 5, 6, and 7 are supported. Secondly, the IFRS is negatively related to PE and DER supporting hypotheses 2 and 4. Thirdly, the IFRS has no relation to CR and ER, thus, there is no support for hypotheses 1 and 3.

Further, the study finds that the relationship between SIZE and IFRS is two-faced. The profitability ratios suggesting that the OPM, ROE, and ROIC of large firms grows after IFRS. Secondly, the DER of large firms is lower after IFRS. On the other hand, the LEV is negatively associated with IFRS under the profitability ratios suggesting higher profitability ratios for large but low-leveraged firms after IFRS.

Additional analysis using current and non-current liabilities in replacement of LEV as a control variable reveals that LEV impacts CR and the profitability ratios. However, the non-current portion tends to hold a relationship with variables in the same degree as leverage does, thus, the non-current component may be used as a substitute of LEV in this study. In conclusion, the analysis of the result shows that large firms with low leverage generate higher profits after IFRS.

The results of this study offer financial analysts, users and advocates of IFRS, accounting regulators, researchers, and academia new evidence of the usefulness of key financial ratios to investigate the effect of IFRS. Moreover, the results of this study would be of great interest of the local and foreign investors with evidence of the changes in leverage and equity, the opportunity cost of leverage-related tax shield, and the higher profits after the adoption of IFRS. The results of this study contribute to the literature by using data from an emerging market, use of seven key financial ratios from previous studies for comparability, the usefulness of financial ratios as measures of firm performance, impact of IFRS on financial ratios, and the role of current and non-current liabilities as control variables in the study of the effects of IFRS.

This study limits the study period from 2012 to 2017 for two reasons. This study isolates the effect of the tax rate cut implemented in 2010 and any spills over in 2011; and the effect of increased corporate income tax rates implemented in 2018. Further studies may consider the impact of IFRS by industries, firm size, and use of other variables, or expand the study related to taxation.

## REFERENCES

1. Aisbitt, S. (2006). Assessing the effect of the transition to IFRS on equity: the case of the FTSE 100. *Accounting in Europe*, 3(1), 117-133.
2. Braga, R. N. (2017). Effects of IFRS adoption on tax avoidance. *R. Cont. Fin.*, 28, 407-424. doi:10.1590/1808-057x201704680
3. Chan, K., Lin, K. Z., & Mo, P. L. (2010). Will a departure from tax-based accounting encourage tax noncompliance? Archival evidence from a transition economy. *Journal of Accounting and Economics*, 50, 58-73. doi:10.1016/j.jacceco.2010.02.001
4. Chen, L. H., Liaw, S. Y., & Shin Chen, Y. (2001). Using financial factors to investigate productivity: an empirical study in Taiwan. *Industrial Management & Data Systems*, 101(7), 378-384.
5. d'Arcy, A. (2001). Accounting classification and the international harmonisation debate—an empirical investigation. *Accounting, organizations and society*, 26(4-5), 327-349.
6. Damayanti, T. W. (2019). The effect of IFRS adoption and law enforcement on book tax aggressiveness: evidence from Asean countries. *Verslas: Teorija ir praktika/Business: Theory and Practice*, 20, 284-292.
7. Fifield, S., Finningham, G., Fox, A., Power, D., & Veneziani, M. (2011). A cross-country analysis of IFRS reconciliation statements. *Journal of Applied Accounting Research*.12(1). 26-42.
8. Goodwin, J., Ahmed, K., & Heaney, R. (2008). The effects of International Financial Reporting Standards on the accounts and accounting quality of Australian firms: A retrospective study. *Journal of Contemporary Accounting & Economics*, 4(2), 89-119.
9. Houqe, M. N. (2017). IFRS Adoption and Audit Fees-Evidence from New Zealand. *International Journal of Business & Economics*

- , 16(1).
10. Huang, R. D., & Shiu, C. Y. (2009). Local effects of foreign ownership in an emerging financial market: Evidence from qualified foreign institutional investors in Taiwan. *Financial management*, 38 (3), 567-602.
  11. Iatridis, G. (2010). IFRS adoption and financial statement effects: The UK case <https://ir.lib.uth.gr/xmlui/handle/11615/28534><Accessed 13 Oct. 2022>
  12. Kumar, T. (2018) Adopting IFRS: Evidence from Bangladeshi Real Estate Sector. *Review of Integrative Business and Economics Research*, 7(3), 222-240
  13. Kuo, H. C., Wang, L. H., Sheu, H. J., & Li, F. K. (2003). Credit evaluation for small and medium- sized enterprises by the examination of firm-specific financial ratios and non-financial variables: Evidence from Taiwan. *Review of Pacific Basin Financial Markets and Policies*, 6(01), 5-20.
  14. Lantto, A. M., & Sahlström, P. (2009). Impact of International Financial Reporting Standard adoption on key financial ratios. *Accounting & Finance*, 49(2), 341-361.
  15. Liang, D., Lu, C. C., Tsai, C. F., & Shih, G. A. (2016). Financial ratios and corporate governance indicators in bankruptcy prediction: A comprehensive study. *European journal of operational research*, 252(2), 561-572.
  16. Lindahl, F., & Schädewitz, H. (2013). Are legal families related to financial reporting quality? *Abacus* , 49(2), 242-267.
  17. Lueg, R., Punda, P., & Burkert, M. (2014). Does transition to IFRS substantially affect key financial ratios in shareholder-oriented common law regimes? Evidence from the UK. *Advances in accounting*, 30(1), 241-250.
  18. Nakao, S.H. and Gray, S.J. (2018). The impact of IFRS in Brazil: The Legacy of Mandatory Book-tax Conformity. *Australian Accounting Review*. 28(4), 482-495.
  19. Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of political economy*, 106(6), 1113-1155.
  20. Salah, W., & Abdel-Salam, A. (2019). The effects of international financial reporting standards on financial reporting quality. *Athens Journal of Business & Economics*, 5(3), 221-242.
  21. Terzi, S., Oktem, R., & Şen, İ. K. (2013). Impact of adopting international financial reporting standards: empirical evidence from Turkey. *International Business Research*, 6(4), 55-66.
  22. Wang, W.-K., Lu, W.-M., Kweh, Q. L., & Siao, W.-Y. (2020). Related-party transactions and corporate performance following the adoption of International Financial Reporting Standards in Taiwan. *Managerial Decision Economics*, 41, 371-379.
  23. Wang, W. K., Lu, W. M., Ting, I. W. K., & Siao, W. Y. (2023). Earnings management and corporate efficiency pre-and post-IFRS: Evidence from Taiwanese listed electronics corporations. *Journal of Applied Accounting Research*, 24(3), 523-543.