Impacts of TFRS 16 Adoption on the Value Relevance of Accounting Information: Evidence from the Stock Exchange of Thailand

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Abstract

The objectives of this study are to examine the value relevance of accounting information affected by Thai Financial Reporting Standard 16: Leases (TFRS 16) and to study whether there are significant alterations to the value relevance of accounting information after TFRS 16 adoption. The study used the companies listed in the SET100 index on the Stock Exchange of Thailand as samples. Ohlson's model was adjusted by adding the variables related to lease transactions, namely right-of-use (ROU) items, which are the book value of ROU, and expenses related to ROU items as exploratory variables. The study duration was 2020–2022. The main results showed that the book value of ROU and expenses related to ROU items were relevant. Moreover, expenses related to ROU items were more relevant than the book value of ROU itself. According to the incremental value relevance of ROU items, the results indicated that the joint effect of ROU items and traditional accounting measures, such as book value of equity and earnings, was indicated to be more valuable and relevant than traditional accounting measures alone. Therefore, overall, ROU items provided incremental value and relevance. However, when considering the influence of TFRS 16 on the statement of financial position and income statement separately, the book value of ROU did not provide incremental value relevance, while expenses related to ROU items provided incremental value relevance.

Keywords: value relevance; TFRS 16; right-of-use items; Stock Exchange of Thailand

Introduction

In the context of today's rapid and complex business environment, the need for sufficient and reliable information for decision-making is of great importance. Accounting information, which is the language of businesses, needs to be developed accordingly. Therefore, the International Accounting Standard Board (IASB) has continually developed financial reporting standards to reach the general purpose of financial reporting, which is to provide useful and relevant financial information about the reporting entity to both existing and prospective investors, lenders, or any other creditor in making any decision.

In January 2016, the IASB issued International Financial Reporting Standard 16: Leases (IFRS 16). IFRS 16 superseded International Accounting Standard 17: Leases (IAS 17) and was effective for annual periods starting on or after January 1, 2019. The main objective of IFRS 16 is to specify the principles of lease transactions in terms of recognition, measurement, presentation, and disclosure to make certain that lessees and lessors will provide relevant and useful financial information that faithfully represents their lease transactions. Afterward, in 2019, the Thailand Federation of Accounting Professions (TFAC) released Thai Financial Reporting Standard 16: Leases (TFRS 16) by translating from IFRS 16. The standard affects the practices applying to the financial statements for annual reporting periods starting on January 1, 2020. The main purpose of the new publication of TFRS 16 is to respond to concerns raised by plenty of financial statement users regarding insufficient transparency of lease obligations and transactions (International Accounting Standard Board, 2016).

From the perspective of equity investors, value relevance is the concept of measuring whether accounting information is useful enough for their decision-making. The higher the value relevance, the more accounting figures and financial statements can explain the movement in companies' stock prices, and investors can use these figures for better investment decisions (Lam et al., 2013). Generally, value relevance studies apply earnings and book value figures as indicators, and the conclusions of many previous studies are alike. In summary, those studies indicated that book values and earnings were value-relevant (Collins et al., 1997; Easton & Harris, 1991). However, the value relevance topic continues to gain attention in the present day because financial reporting standards have been repetitively developed over time. According to the effects of standard development, value relevance studies have been studied from several perspectives,

and their findings are varied. For instance, several studies during the period of IFRS adoption have concluded that switching from local Generally Accepted Accounting Principles (GAAP) to IFRS led to the increasing value relevance of accounting information. (Barth et al., 2008; Chua et al., 2012; Latridis, 2010). However, some prior studies revealed an absence of progress in value relevance following IFRS adoption (Dobija & Klimczak, 2010; Paananen & Lin, 2009). In the case of comprehensive income (CI), as stated in International Accounting Standard 1: Presentation of Financial Statements (IAS 1), some earlier findings pointed out that comprehensive income was more value-relevant than profit-net income). (Günther, 2015; Kanagaretnam et al., 2009), whereas some studies provided contradictory findings (Brimble & Hodgson, 2005; Mechelli & Cimini, 2014). In summary, these mentioned studies provided some empirical evidence of accounting usefulness upon IFRS change in each period, but the results are still inconclusive.

Therefore, the motivation for this study comes from the entry into force of TFRS 16 in 2020 and its significant and multi-dimensional impacts. The empirical evidence derived from this study will provide useful information for both accounting professionals and financial reporting users. It will give the policy guidelines involving TFRS revision and development to regulators such as TFAC and the Securities and Exchange Commission (SEC). Moreover, it could help create awareness of the significance of accounting information among all groups of users.

Research Objective

This study aims to examine the value relevance of accounting information affected by Thai Financial Reporting Standard 16: Leases (TFRS 16) and to study whether there are significant alterations to the value relevance of accounting information after TFRS 16 adoption.

Scope of the Research

The study takes Thai-listed firms on the SET100 index, excluding companies in the financial sector, as a research object. The period of study is from 2020 to 2022, after the mandatory adoption of TFRS 16 by TFAC. The data used in the study were collected from secondary sources. Accounting information was obtained from published audited financial statements, including the notes of Thai-listed firms on the SET100 index, and stock price data

obtained from SETSMART, the Thai-listed company information database controlled by the Stock Exchange of Thailand.

Literature Review and Hypothesis Development

Value Relevance

Value relevance is the concept that most equity investors use to evaluate the usefulness of accounting figures in explaining the movements of companies' stock prices. An accounting number is considered to have value relevance if it exhibits a strong connection with market measures of value such as a firm's market value or stock returns (Collins et al., 1997; Francis & Shipper, 1999), and from the past until now, most previous literature has determined value relevance by using the coefficient of determination (R^2) of the regression model of market value of equity against either earnings or book values or both (Collins et al., 1997; Ely & Waymire, 1999; Francis & Schipper, 1999).

Based on the study of Holthausen and Watts (2001), there are three categories of value-relevant studies. The first one is a relative association study. The main purpose of this study is to test the presence of any association between financial information and the information given by stock prices or stock returns. Specifically, this study investigates whether using some specific accounting standards has a stronger relationship with market values than using any other accounting standard or not. The second one is an incremental association study. This kind of study aims to explore whether the concerned financial information helps explain changes in stock price or stock return over a long time or not. The third one is a marginal information content study. By using event analysis (short-window studies), this study focuses on studying whether certain information included in the one available is regarded as relevant or not.

Leases

IAS 17: Leases, the old lease accounting standard, was introduced in 1982. Under this standard, companies were required to classify their leases as either finance leases or operating leases. Finance leases were handled in such a way that the firm had purchased the asset and were recognized and presented in the statement of financial position as assets and liabilities. In contrast, operating leases were categorized as expenses and were not incorporated into the statement of financial position. This means that companies could use operating leases to avoid

reporting lease liabilities on their statements of financial position, which could have a considerable influence on both financial statements and financial ratios. A large amount of research has investigated the impacts of capitalization of off–balance sheet leases on financial statements. Some previous studies showed that information on operating leases was crucial and relevant to financial statement users' decision–making. Besides, capitalizing lease could improve financial statement reliability (Beattie et al., 1998; Bennet & Bradbury, 2003; Imhoff et al., 1991; Lückerath & de Bos, 2009). IASB did not overlook this issue. Then, in January 2016, the new lease accounting standard, IFRS 16 was published by IASB to substitute the outdated IAS 17. In Thailand, TFAC issued Thai Financial Reporting Standard 16: Leases (TFRS 16) by translating from IFRS 16. The standard has affected the practices applying to the financial statements for annual reporting periods since January 1, 2020.

TFRS 16 provides the principles for lease transactions covering from recognition, measurement, and presentation to disclosure of leases. The main purpose of this standard is to make certain that both lessees and lessors can provide relevant information that faithfully represents their lease transactions. This information will give a starting point for financial statement users to evaluate the effect of lease transactions on an entity's financial position, and financial performance, including cash flows. For lease recognition, TFRS 16 demands an entity to consider whether its contract is a lease or contains a lease at the beginning of the contract. For lease measurement, the standard provides only a single lessee accounting model. Upon lease commencement, a lessee is commanded to recognize a right–of–use (ROU) asset and a lease liability for all lease transactions unless the lease term is less than twelve months, or the identified asset has a small value. In the beginning, the right–of–use (ROU) asset is determined by summing the lease liability and any other initial direct cost paid by the lessee together. Following lease commencement, a lessee should measure the value of the right–of–use (ROU) asset using the cost model which is cost less accumulated depreciation and accumulated impairment (if any). On the other hand, the lease liability is initially measured at the present value (PV) of the lease payments payable during the lease term. Normally, an entity can discount the lease payments payable by using the interest rate implicit in the lease. However, if an entity cannot find the appropriate discount rate immediately, the incremental borrowing rate should be a suitable one. For subsequent measurement, the lease liability must be recalculated to reflect many important issues such as modifications in the lease term, future lease payments caused by an adjustment in

an index, evaluation of a purchase option, as well as a rate used to determine those payments. For lessors, the guidelines for lease transactions are still the same. Overall, like TAS 17: Leases, TFRS 16 requires a lessor to maintain the lease classification by grouping leases as operating leases or finance leases, respectively (TFAC, 2019). For disclosure requirements, unlike TAS 17, TFRS 16 requires an entity to disclose different and more comprehensive information regarding lease transactions. The main purpose of the disclosures is to provide all information that is necessary for evaluating the impacts of lease transactions on an entity's financial reports (Grant Thornton, 2019).

Previous Studies on IFRS 16: Leases

After the adoption of IFRS 16, many researchers worldwide were interested in studying the consequences of the IFRS 16 adoption. For the effects of IFRS 16 on financial ratios and performance measures, PricewaterhouseCoopers International Limited (PwC) (2016) and Deloitte Touche Tohmatsu Limited (2019) provided the outcomes of the study in the same direction which were the increase of reported debt (22%, 16%) and EBITDA (13%, 10%), respectively. The study on the topic of value relevance can be divided into 2 types which are ex–ante study and ex–post study of IFRS 16. The results of ex–ante studies of the potential consequences of capitalizing operating leases on the value relevance are mixed. Some of the studies did not support the lease recognition requirement (Arata, 2010; Beattie et al., 1998). Their studies indicated that operating leases had been evaluated by analysts and investors long before the IFRS 16 publications. However, Callahan et al. (2013) presented evidence supporting the improvements in value relevance and reliability of synthetic leases since the adoption of FASB Interpretation No. 46 (FIN 46). In addition, Xu et al. (2017) pointed out that in Australia, the changes in the book value of equity due to capitalizing operating leases were value–relevant, yet the changes in existing earnings did not have a great impact on the current market value.

Later when IFRS 16 came into force, plenty of ex–post studies revealed that the IFRS 16 application helped improve the value relevance of accounting information. Hansson and Pettersson (2020) studied the value relevance of IFRS 16 on the Swedish stock market. The study suggested that the value relevance escalated after the implementation, especially in the lease–intensive industries such as airlines, retail, and service industries. Chen et al. (2021) also provided empirical evidence that there was an increase in the incremental power for changes in stock prices after the

IFRS 16 adoption. However, Matos (2021) showed contradictory results by pointing out that the IFRS 16 application was not affecting the value relevance of accounting information.

Hypothesis Development

Based on previous studies suggesting that the IFRS 16 application could improve the value relevance of accounting information (Callahan et al., 2013; Chen et al., 2021; Hansson & Pettersson, 2020; Xu et al., 2017) in conjunction with expectations of IASB to provide relevant information in a manner of faithfulness. Hence, we predict that right–of–use items, created by TFRS 16 which are the book value of ROU calculated by ROU assets minus lease liability, depreciation of ROU assets, and interest on the lease liabilities, are value relevant. Then, the first group of hypotheses was set as follows.

H1: ROU items, which are the book value of ROU assets and expenses related to ROU items: depreciation of ROU assets, and/or interest on the lease liability, are value relevant.

H1a: The book value of ROU assets is value–relevant.

H1b: Expenses related to ROU items are value–relevant.

H1c: When testing the effects of ROU items simultaneously, all ROU items are value–relevant.

We also predict that ROU items may provide incremental value relevance to the traditional accounting measures which are book value of equity and earnings. Then, the second group of hypotheses was set as follows.

H2: ROU items provide incremental value relevance to traditional accounting measures.

H2a: The book value of ROU assets provides incremental value relevance to the book value of equity.

H2b: Expenses related to ROU items provide incremental value relevance to earnings.

H2c: When testing the effects of ROU items simultaneously, all ROU items provide incremental value relevance to the traditional accounting measures.

Research Methodology

1. Population and Samples

The study has been carried out using samples of Thai listed firms on the SET100 index, during the period of three years (from 2020 to 2022), after the TFRS 16 mandatory adoption by TFAC. To begin with, we identified Thai-listed firms announced in the SET100 index each year. Then, we excluded firms in the financial industry (50 firms). Furthermore, this study excluded the non-December year-ended firms (12 firms) to control the impacts of external factors on stock price, the no ROU item firms (6 firms), and firms with incomplete data (8 firms). Then, the data were divided into 2 sub-data sets. Data set 1 is a sample group whose interest in the lease liability information was not available (224 samples). Therefore, the expense related to ROU assets of this group was the depreciation of ROU assets only. On the other hand, data set 2 is a sample group in which interest on the lease liability information was available (196 samples); therefore, expenses related to ROU items of this group were both depreciation of ROU assets and interest on the lease liability.

2. Research Instrument

The models applied in this study were designed based on the studies of Ohlson (1995) and Feltham and Ohson (1995). There are three groups of research models. Each model group was divided into 3 sub-models. To test Hypothesis 1 (H1a – H1c), a group of models, called group 1, was developed. This group consists of three models, namely Model (1.1), Model (1.2) and Model (1.3). The first two models, Model (1.1) and Model (1.2) were designed to assess the value relevance of ROU (Right-of-Use) items individually, while Model (1.3) was developed to assess the combined value relevance of ROU items.

Model Group 1:

$$P_{it} = \beta_0 + \beta_1 BVROU_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 GROW_{it} + \beta_5 \Sigma(Industry)_i + \beta_6 \Sigma(Year)_t + \varepsilon_{it} \quad (1.1)$$

$$P_{it} = \beta_0 + \beta_1 ExpROU_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 GROW_{it} + \beta_5 \Sigma(Industry)_i + \beta_6 \Sigma(Year)_t + \varepsilon_{it} \quad (1.2)$$

$$P_{it} = \beta_0 + \beta_1 BVROU_{it} + \beta_2 ExpROU_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 GROW_{it} + \beta_6 \Sigma(Industry)_i + \beta_7 \Sigma(Year)_t + \varepsilon_{it} \quad (1.3)$$

P_{it} = Stock price of firm i, year t at the submission date of annual financial statement in year t;

$BVROU_{it}$ = Book value of ROU assets per share of firm i, year t calculated by subtracting a lease liability from a right-of-use asset;

$ExpROU_{it}$ = Expenses related to ROU items per share of firm i, year t;

$SIZE_{it}$ = Size of firm i, year t determined by log of total assets of firm i, year t;

LEV_{it} = Leverage of firm i, year t calculated by total liabilities divided by total equity of firm i, year t;

$GROW_{it}$ = Growth of firm i, year t calculated by market value of equity divided by book value of equity of firm i, year t; and

ε_{it} = error term

To prove Hypothesis 2 (H2a – H2c), model group 2-3 consisting of model (2.1) to model (2.3) and model (3.1) to model (3.3) were developed. Model group 2, which is Model (2.1-2.2), examined the value relevance of book value of equity before ROU items (BVBefore) and earnings before expenses related to ROU items (EBefore), respectively, while Model (2.3) examined combined value relevance of those two variables. Model group 3 was developed by adding ROU items which are BVROU and ExpROU to model group 2.

Then we applied the incremental value relevance concept to prove whether earnings and book values of equity affected by IFRS 16 were value-relevant. Incremental value relevance was determined by comparing the coefficient of determination (R^2 before) of Model (2.1-2.3) and the coefficient of determination (R^2 after) of Model (3.1-3.3). The increase in the coefficient of determination (R^2 after) would represent the incremental value relevance of TFRS 16. Industry- and year-fixed effects were also incorporated into all models in Groups 2 and 3 to control for unobservable characteristics that remain constant over time.

Model Group 2:

$$P_{it} = \beta_0 + \beta_1 BVBefore_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 GROW_{it} + \beta_5 \Sigma(Industry)_i + \beta_6 \Sigma(Year)_t + \varepsilon_{it} \quad (2.1)$$

$$P_{it} = \beta_0 + \beta_1 EBefore_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 GROW_{it} + \beta_5 \Sigma(Industry)_i + \beta_6 \Sigma(Year)_t + \varepsilon_{it} \quad (2.2)$$

$$P_{it} = \beta_0 + \beta_1 BVBefore_{it} + \beta_2 EBefore_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 GROW_{it} + \beta_6 \Sigma(Industry)_i + \beta_7 \Sigma(Year)_t + \varepsilon_{it} \quad (2.3)$$

Model Group 3:

$$P_{it} = \beta_0 + \beta_1 BVBefore_{it} + \beta_2 BVROU_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 GROW_{it} + \beta_6 \Sigma(Industry)_i + \beta_7 \Sigma(Year)_t + \varepsilon_{it} \quad (3.1)$$

$$P_{it} = \beta_0 + \beta_1 EBefore_{it} + \beta_2 ExpROU_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 GROW_{it} + \beta_6 \Sigma(Industry)_i + \beta_7 \Sigma(Year)_t + \varepsilon_{it} \quad (3.2)$$

$$P_{it} = \beta_0 + \beta_1 BVBefore_{it} + \beta_2 BVROU_{it} + \beta_3 EBefore_{it} + \beta_4 ExpROU_{it} + \beta_5 SIZE_{it} + \beta_6 LEV_{it} + \beta_7 GROW_{it} + \beta_8 \Sigma(Industry)_i + \beta_9 \Sigma(Year)_t + \varepsilon_{it} \quad (3.3)$$

$BVBefore_{it}$ = Book value of equity before ROU items per share of firm I, year t

$Ebefore_{it}$ = Earnings before expenses related to ROU items per share of firm I, year t;

All other variable definitions are the same as indicated above.

3. Data Analysis

Data analysis employed descriptive statistics such as Mean, Standard Deviation (SD) as well as max.–min., and inferential statistics such as correlation matrix and multiple regression. The statistical software package applied for the study is SPSS V.18: Statistical Package for Social Science. It was downloaded from the Mahidol Software License website. There are two main parts of multiple regression analysis. Firstly, the analysis focused on examining the value relevance of ROU items separately. Secondly, incremental value relevance was examined by comparing the value relevance of each ROU item with the combined value relevance of both traditional accounting items and ROU items.

Results

1. Descriptive Analysis

Table 1 Descriptive Analysis

	Data Set 1 (N=224)				Data Set 2 (N=196)			
	Min.	Max.	Mean	SD.	Min.	Max.	Mean	SD.
Price	0.58	416.00	40.57	60.70	0.58	416.00	38.08	61.73
BvBefore	0.38	372.48	22.82	48.80	0.38	372.48	20.04	45.51
EBefore	–2.86	48.20	2.67	5.48	–1.34	48.60	2.72	5.62
BVROU	–2.17	15.88	0.98	2.80	–2.17	15.81	0.87	2.55
ExpROU	–4.38	–.0002	–0.36	0.72	–4.74	–0.0002	–0.41	0.81
SIZE	21.96	28.86	24.94	1.39	21.96	28.86	24.84	1.40
LEV	0.15	16.69	1.51	1.70	0.15	16.69	1.40	1.73
GROW	0.00	22.42	3.54	3.35	0.34	22.42	3.66	3.48

Table 1 shows descriptive statistics of both dependent and independent variables used for data analysis. For data set 1, the mean of the dependent variable, which was the stock price, was 40.57 Baht, and there was a wide variation from 0.58 Baht to 416 Baht. The independent variables consisted of items shown in the statement of financial position and income statement. BVBefore had a mean of 22.82 Baht and a vast range of values from a minimum of 0.38 Baht to a maximum of 372.48 Baht. It indicated that the sample covered a broad range of companies from rather small to relatively large. EBefore had a mean of 2.67 Baht. BVROUs of the sample firms were presented in both negative and negative values. It might be a positive figure if the right–of–use assets exceed lease liabilities and might be a negative one once the opposite is true. BVROU had a mean of 0.98 Baht. It could be implied that on average, the sample companies had right–of–use assets greater than lease liabilities. ExpROU of data set 1, depreciation of ROU assets, had a mean of –0.36 Baht. For control variables, the means of SIZE, LEV, and GROW were 24.94, 1.51, and 3.54, respectively. The descriptive statistics of the data set 2 were slightly different from data set 1. The mean stock price was 38.08 Baht. For independent variables, the means of BVBefore, EBefore, BVROU, and ExpROU were 20.04, 2.72, 0.87, and –0.41, respectively. For control variables, the means of SIZE, LEV, and GROWTH are 24.84, 1.40, and 3.66. Moreover, the standard deviation of each variable from data sets 1 and 2 was rather high which could imply that the samples were diverse.

2. Correlation Analysis

Table 2 Correlation Analysis

	Price	BvBefore	EBefore	BVROU	ExpROU	SIZE	LEV	GROW
Panel A: Data set 1								
Price	1							
BvBefore	.744**	1						
EBefore	.685**	.750**	1					
BVROU	.308**	.366**	.395**	1				
ExpROU	–.507**	–.401**	–.570**	–.546**	1			
SIZE	.320**	.437**	.342**	.361**	–.405**	1		
LEV	–.075	–.078	–.066	.105	–.254**	.229**	1	
GROW	.212**	–.190**	–.035	–.092	–.088	–.355**	.094	1
Panel B: Data set 2								
Price	1							
BvBefore	.728**	1						
EBefore	.683**	.789**	1					
BVROU	.374**	.487**	.451**	1				
ExpROU	–.556**	–.490**	–.630**	–.580**	1			
SIZE	.297**	.438**	.358**	.412**	–.426**	1		
LEV	–.051	–.058	–.027	.060	–.279**	.221**	1	
GROW	.252**	–.160*	–.020	–.083	–.106	–.355**	.121	1

*** significant for the two–tailed test at 0.01 level

** significant for the two–tailed test at 0.05 level

Table 2 shows Pearson's correlation among dependent and independent variables used in the research model (1) to model (3) for both data sets. The degree of correlation is defined as a high degree when the coefficient value lies between **±** 0.50 and **±** 1 while it is defined as a moderate degree when the coefficient value lies between ± 0.30 and ± 0.49 (Statistics Solutions, 2024). For data set 1, the result indicated that stock price (P) was positively and significantly related to BVBefore (r = 0.744), EBefore (r = 0.685), and BVROU (r = 0.308), while it was negatively related to ExpRou (r = –0.507). For data set 2, the result specified that stock price (P) was positively and significantly related to BVBefore (r = 0.728), EBefore (r = 0.683), and BVROU (r = 0.374), while it was negatively related to ExpRou (r = –0.556). For both data sets, independent variables including control variables were also correlated but the statistics show that such relationships did not lead to a Multicollinearity problem (coefficient < 0.8) (Simmonds, 2017).

3. Regression Analysis

Table 3 Regression Analysis Relevance of ROU items

	Model 1.1		Model 1.2		Model 1.3	
Variables	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Panel A: Data set 1						
Intercept	-462.953***	0.000	-336.562***	0.000	-332.557***	0.000
BVROU	0.211***	0.001			0.030	0.638
ExpROU (Depre)			-0.419***	0.000	-0.404***	0.000
Control Variables						
SIZE	0.444***	0.000	0.329***	0.000	3.841***	0.000
LEV	-0.237***	0.000	-0.286***	0.000	-4.875***	0.000
GROW	0.411***	0.000	0.318***	0.000	5.439***	0.000
Industry-Fixed Effect	Yes		Yes		Yes	
Year-Fixed Effect	Yes		Yes		Yes	
N	224		224		224	
F-value	24.804***		37.534***		29.965***	
Adjusted R2	0.299		0.396		0.394	
Durbin-Watson	2.025		2.045		2.036	
Max VIF	1.400		1.523		1.706	
Panel B: Data set 2						
Intercept	-414.082***	0.000	-282.459***	0.000	-274.621***	0.00
BVROU	0.262***	0.000			0.041	0.565
ExpROU (Depre&Int)			-0.486***	0.000	-0.464***	0.000
Control Variables						
SIZE	0.390***	0.000	0.272***	0.000	0.264***	0.000
LEV	-0.206***	0.001	-0.287***	0.000	-0.282***	0.000
GROW	0.437***	0.000	0.322***	0.000	0.334***	0.000
Industry-Fixed Effect	Yes		Yes		Yes	
Year-Fixed Effect	Yes		Yes		Yes	
N	196		196		196	
F-value	23.986***		38.920***		31.099***	
Adjusted R2	0.320		0.438		0.436	
Durbin-Watson	2.026		2.108		2.094	
Max VIF	1.495		1.574		1.858	

*** significant for a two-tailed test at 0.01 level

Table 4 Regression Analysis–Incremental value relevance of ROU items

	R^2 Before	R^2 After	R^2 Change
Panel A: Data set 1			
BVROU (model 2.1 & model 3.1)	0.698 (2.1)	0.697 (3.1)	decrease
ExpROU (model 2.2 & model 3.2)	0.568 (2.2)	0.574 (3.2)	increase
BVROU + ExpROU (model 2.3 & model 3.3)	0.711 (2.3)	0.724 (3.3)	increase
Panel B: Data set 2			
BVROU	0.681 (2.1)	0.679 (3.1)	decrease
ExpROU	0.571 (2.2)	0.581 (3.2)	increase
BVROU + ExpROU	0.690 (2.3)	0.706 (3.3)	increase

Note: Numbers in parentheses are the numbers of the model already shown in the research instrument section.

Regression analyses were divided into two main parts. Firstly, the value relevance of each ROU item, which was the book value of ROU assets and expenses related to ROU assets including the combined value relevance of ROU items, was analyzed (Table 3). Secondly, the analyses would focus on the incremental value relevance of ROU items (Table 4).

Table 3 shows the regression results of model 1.1 – model 1.3 for both data sets 1 and 2. Panel A of the table shows the results of data set 1. According to F–stat, the findings indicated that overall, model 1.1– model 1.3 were statistically significant (F value = 24.804, 37.534, and 29.965, respectively). At least, one of the explanatory variables could explain the movements in stock prices. For model 1.1, the coefficient of BVROU (β_1) was positive and statistically significant ($p<0.01$). This meant that the book value of right–of–use (ROU) assets was positively and significantly correlated with stock price. For model 1.2, the coefficient of ExpROU (β_1) was negative and statistically significant ($p<0.01$). That was, expense, and depreciation of ROU assets, related to ROU assets was negatively and significantly related to stock price. Nonetheless, when considering all ROU items at the same time as stated in model 1.3, the results of value relevance of BVROU were changed. The coefficient was still positive but statistically insignificant. However, the coefficient of ExpROU remained negative and statistically significant ($p<0.01$). For control variables, the results of model 1.1 – model 1.3 were in the same direction. The coefficients of SIZE (β_2) and GROW (β_4) were positive and significant ($p<0.01$), while the coefficients of LEV (β_3) were negative and significant ($p<0.01$).

Panel B of Table 3 shows the results of data set 2. Overall, its results were in the same direction as data set 1's results. For model 1.1, the coefficient of BVROU (β_1) was positive and statistically significant ($p<0.01$). For model 1.2, the ExpROU variable was different from the ExpROU variable of data set 1 since the ExpROU of data set 2 included interest on lease liability. The coefficient of ExpROU (β_1) was negative and statistically significant ($p<0.01$). That was, expenses, depreciation of ROU assets, and interest on lease liability, related to ROU were negatively and significantly related to stock price. Nonetheless, when considering all ROU items at the same time as stated in model 1.3, the results of value relevance of BVROU were changed. Like what happened in data set 1, the coefficient was yet positive but statistically insignificant. Nevertheless, the coefficient of ExpROU remained negative and statistically significant ($p<0.01$). Furthermore, the ExpROU of data set 2 could better clarify the fluctuations in stock price than the ExpROU of data set 1. For control variables, the results of model 1.1 – model 1.3 were in the same direction. The coefficients of SIZE (β_2) and GROW (β_4) were positive and statistically significant ($p<0.01$), while the coefficients of LEV (β_3) were negative and statistically significant ($p<0.01$).

The findings of both data sets could imply that when considering the variables of ROU items, which were the book value of ROU assets, and expenses related to ROU items individually, each of them was value relevant. Consequently, H1a and H1b were not rejected. However, when considering the two variables together (BVROU and ExpROU), it was found that only the ExpROU could explain the stock price. That might be concluded that expenses related to ROU items (either only the depreciation of ROU assets or the combined value of depreciation of ROU assets and interest on lease liability) could explain the movement of stock price more than the book value of ROU itself. Therefore, H1c was rejected.

The analysis of incremental value relevance of ROU items is presented in Table 4. Details from regression analyses were not exhibited here. Nevertheless, this article summarized the coefficient of determination (R^2) of model 2.1 – 2.3, namely R^2 Before, and model 3.1–3.3, namely R^2 After. The incremental value relevance of ROU items was assessed by the difference between the R^2 Before and R^2 After. Starting by analyzing data set 1, R^2 After model 3.1 (0.697) was lower than R^2 Before model 2.1 (0.698). For models 2.2–2.3, the results were different. R^2 After of model 2.2–2.3 (0.574 and 0.724) were higher than R^2 Before of those models (0.568 and 0.711).

In addition, for data set 2, in general, the results were not different from those of data set 1. R^2 After of model 3.1 (0.679) was lower than R^2 Before of model 2.1 (0.681), and for model 2.2–2.3, R^2 After of model 3.2–3.3 (0.581 and 0.706) were higher than R^2 Before of those models (0.571 and 0.690). Both data sets pointed out that BVROU did not have incremental value relevance, but ExpROU items had incremental value relevance. When considering all of the ROU items together, all of them had incremental value relevance. The findings could be concluded that hypothesis H2a was rejected, but hypothesis H2b and H2c were not rejected.

Discussion

Based on the first research objective examining the value relevance of accounting information affected by TFRS16: ROU items, the main result pointed out that when considering each ROU item individually based on the statement of financial position section and income statement section, the book value of ROU assets and expenses related to ROU items were value relevant. This meant that each ROU item had a significant ability to explain the stock price. This result was in the same direction as many studies investigating the impacts of implementing other IFRSs. For instance, Kanagaretnam et al. (2009) and Günther (2015) concluded that other comprehensive income (OCI) from IFRS 1 adoption was value-relevant. However, when considering all ROU items at the same time, only expenses related to ROU items were value-relevant. The possible reason may come from the fact that normally, investors pay more attention to profit for the year presented in companies' income statements than any other item in companies' financial statements. Another possible explanation was that the book value of ROU assets was calculated by subtracting lease liability from right-of-use asset and the net values were relatively small and insignificant from investors' perspective. Therefore, when studying the effects of all ROU items together, expenses related to ROU items, which are presented in companies' income statements, had value relevance much more than the book value of ROU itself, and the ability to explain the stock price of the book value of ROU decreased significantly. These outcomes were consistent with the results of Acaranupong (2022) which showed that there was an increase in the value relevance of earnings; nonetheless, the value relevance of the book value of equity had not changed after the adoption of TFRS (revised 2019).

For the second research objective, the significant alterations to the value relevance of accounting information after TFRS 16 adoption were analyzed based on incremental value relevance analysis. The result showed that there were significant alterations to the value relevance of accounting information after the TFRS 16 adoption. However, there were different results between ROU items. On the statement of financial position side, the book value of ROU assets did not provide incremental value relevance to the book value of equity while on the income statement side, expenses related to ROU items provided incremental value relevance to earnings. In addition, when combining traditional accounting measures which are book value of equity and earnings with all ROU items, incremental value relevance was shown. The results of this study were consistent with the results of Acaranupong (2022) which showed that there was an increase in the value relevance of earnings; nonetheless, the value relevance of book value of equity had not changed after the adoption of TFRS (revised 2019). Moreover, our findings were also consistent with the works of Brusewitz and Pettersson (2020), Chen et al. (2021), and Wang et al. (2020), which concluded that there was an incremental value relevance of accounting information following the adoption of IFRS 16.

Conclusion

In conclusion, this study aims to examine the value relevance of accounting information affected by Thai Financial Reporting Standard 16: Leases (TFRS 16) and to study whether there are significant alterations to the value relevance of accounting information after TFRS 16 adoption. The study is empirical research by using the companies listed in the SET100 index on the Stock Exchange of Thailand as a sample. Overall, the results provided empirical evidence that TFRS 16 adoption had a significant impact on the value relevance of accounting Information. Specifically, TFRS 16 provided a positive influence because when TFRS 16 was enforced, accounting information resulting from TFRS 16 practices better reflected stock prices and was more useful for decision–making.

Suggestion

From the empirical evidence which stated that the issuance of TFRS 16 made accounting information more useful, this paper provides practical implications to both regulatory bodies and

users of financial statements. Specifically, regulatory bodies such as TFAC and SEC, should play a supporting role by issuing the additional guidelines and monitoring the practical implication of TFRS 16 to ensure that the standard is applied appropriately. Users of financial statements such as investors, should be aware of the usefulness of accounting information affected by TFRS 16 and could use this information more effectively.

There are a few limitations of this research. First, due to the sample size and country specifications, the findings might impose a limitation in generalization. Consequently, future studies might deal with this limitation by conducting country–level investigations. Second, there is no other explanatory variable that might be included in the model to study the value relevance of RU items. Thus, future studies could extend this study by investigating the impact of other factors such as industry type and governance mechanism affecting the value relevance of ROU items. Furthermore, because the study period in this paper was the period when the economy had just begun to recover from the COVID–19 crisis, extending the study period by using longer duration or different periods might be another way to provide other remarkable results.

Body of Knowledge

The study presented empirical evidence to confirm that the adoption of TFRS 16 reaches the general purpose of financial reporting in providing useful and relevant financial information of the reporting entity to both existing and prospective investors, lenders, or any other creditor in making any decision. Moreover, accounting information affected by TFRS 16 has the fundamental qualitative characteristics of useful financial information which are relevance and faithful representation as shown in Figure 1.

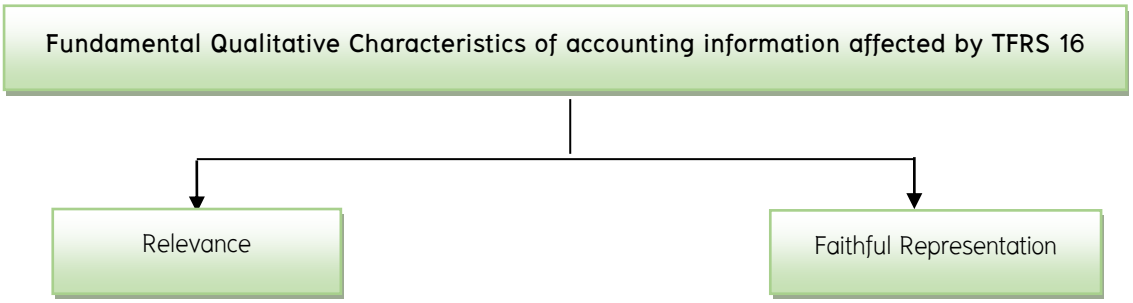

Figure 1 Qualitative Characteristics of Accounting Information Affected by TFRS 16

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