

Fair Value Accounting of Investment Securities and Earnings Management: Empirical Evidence from Thai Listed Companies

Trairong Swatdikun¹ and Teerapan Ungphakorn²

Abstract

The growing interest in fair values among academia has been observed through new financial reporting standards default financial assets to be reported at fair value. Thus, ongoing unease side effect of fair values on earnings manipulation should be reviewed. This archival research studies relationship between fair values accounting for investment securities on earnings management using all Thai listed companies in SET100 during 2011-2013. The finding reveals that there is no relationship between earnings management and unrealized gains and loss from available-for-sale securities. Thus, the use of fair value accounting does not encourage the earnings management to be active.

Keywords: Fair value Accounting, Investment Securities, Other comprehensive income, Earnings Management, Set 100 index

¹Assistant Professor of Business School, Mahasarakham University E-mail: trairong.s@acc.msu.ac.th

²Assistant Professor of Business School, Mahasarakham University E-mail: teerapun.u.s@acc.msu.ac.th

Introduction

Cross-border investment has had a predominant effect on the business environment for more than a decade and its consequences still play a major role on global society as a whole. On the one hand, it creates such an outstanding opportunity for those who are capable and willing to take the opportunity to make investments that can reach new destinations that has ever been possible. However, the world occasionally meets an economy encounter. This uncertainty has challenged academia to find out the main root cause of the unstable economy. Unexpectedly, financial reporting receives devastate attention from public on the guilt that not all relevance information are provide as needed on their decision making.

Price Waterhouse Coopers (2013) indicates that one of the most controversial things in accounting is the use of fair value accounting for measuring the value of assets which has been a source of controversy. The pro of fair value accounting stands on the point that financial statement should reflect the impact of current market conditions on financial instruments. However, the con is the uncertainty in its values due to market volatility. Subsequently, it is claimed that fair value is perfect and it can be the best method to reflect market conditions when it is accompanied by appropriated disclosure. The key concept of fair value is that accounting values of any assets or liabilities are based on the current market price. Thus, these values can be changed regarding to the change of market condition (Sodan, 2015). This concept is in contrast to the historical cost accounting

which based on the past transactions by summarizing past transactions. As a result, historical cost accounting is a simpler, more stable, and easier method even though it does not represent current market value (Masadan, 2016). Consequently, using fair value accounting can create high volatility when market prices are greatly fluctuated or change unpredictably. Buyers and sellers may claim a number of specific instances when this is the case (Kazmouz, 2010). In addition, they may be unable to value the future income and expenses accurately and collectively due to unreliable information and over-optimistic/over-pessimistic expectations. As a result, accounting for investment provides another possible room for a game of number being preceded since this method allow judgments of classification process (Xu, 2013). This might result in the decrease of the qualitative character of financial reporting.

Greenberg et al (2013) indicates that even though fair value measurement on financial asset has been heavily criticized, it seems to be warm welcoming, especially accounting of financial instruments which are more reliable by making use of market values as convincing representation of risk management issues. Thus, this research examines the treatment of fair value accounting for investment securities. It, then, examines the effect of fair value accounting for investment securities on earnings management.

Literature Review

Parbonetti et al. (2011) indicate that the Financial Accounting Standards Board (FASB)

and International Accounting Standards Board (IASB) originally developed fair value measurement and reporting standards separately. Chea (2011) asserts that, in 2009, the FASB and the IASB met and agreed that they would cooperate and develop common requirements. They concluded that quality of financial information could be improved if fair value has the same meaning as well as the same measurement and disclosure requirements. Later, the meeting was held again in early 2010 which resulted in a FASB's exposure draft of amendments, while the IASB issued an exposure draft on the disclosure of a measurement uncertainty analysis. The IASB, then, issued its new standard, International Financial Reporting Standards 13 (IFRS13) Fair Value Measurement, in May 2011. At the same time, the FASB issued accounting standards update 2011-2014 which changed many wordings of its requirements for measuring fair value and disclosing information about fair value measurements.

Fair Value Accounting

IASB (2010) and FASB (2011) define fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). Components of fair value are:

The Price is value that would be received to sell the asset (or paid to transfer the liability) at the measurement date. Thus, the price is measured in a hypothetical transaction to sell an asset or transfer a liability (exit price) which is not in an actual transaction to acquire an asset or assume a liability (entry price).

The Principal Market is the market which the reporting entity would sell the asset or transfers the liability with the greatest volume and level of activity for the asset or liability. If principal market does not exist, the most advantageous market can be chosen. It is the market which the price obtained maximizes the amount received (not the price). Nevertheless, if principal market exists, fair value is the price in that market, even the price in other market is more advantageous.

Market Participants are the buyers and sellers in the principal market that are: independent of the reporting entity, knowledgeable of the asset or liability and the transaction (including the results of usual diligence), able to transact for the asset or liability, and willing and motivated to transact for the asset or liability (but not forced or otherwise compelled). The Market Participants may or may not be other entities in the same industry. For instance, a manufacturing company holds land which its highest and best use is for residential development. Thus, the residential real estate developer may be a market participant. Specific individual market participants do not have to be identified.

The Orderly Transaction is a transaction that assumes exposure to the market for a period prior to the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities. It is neither a forced nor unhurried transaction.

Highest and Best Use is defined as the use of an asset by market participants that

would maximize the value of the asset (or the group of assets within which the specific asset would be used). The use must be physically possible, legally permissible, and financially feasible. Highest and best use can be viewed from any market participants even though the use differs from the company. Valuation premise used with the highest and best use establishes the valuation premise for the asset; In-use– the asset would provide maximum value to the market participants principally through its use in combination with other assets as a group, In-Exchange – the asset would provide maximum value to the market participants principally on a standalone basis.

Definition of those elements are now aligned and clearly defined. Thus, measurement is reasonably expected to be comparable. Disclosure requirement is the only remaining missing puzzle. Subsequently, fair value hierarchy is introduced. Hierarchy of input into fair value measurement is a new concept and has been introduced in order to increase consistency and comparability in fair value measurements and related disclosures, the IFRS establishes a fair value hierarchy that categorizes into three levels of inputs to valuation techniques used to measure fair value. KPMG (2015) asserts that disclosure is the only issue remained differ between IFRS and US GAAP where IFRS requires quantitative sensitivity information about level 3 recurring measurement of financial instruments, as well as US GAAP does not required further disclosure for non-public entities.

Fair Value Accounting on Investment Securities

Kieso et al. (2014) indicates that investment securities are obligations purchased to gain a return on the form of interest, dividend, or/and price gain. Securities included in the investment account should provide a reasonable rate of return commensurate with risk, which must take precedence. Spiceland et al (2015) indicates that neither investment which investor has significant influence over the operating and financial policies of the investee nor the investor controls the investee should not be focus as it is reported as through consolidated financial statement. Thus, the investment which the investor lacks significant influence over the operating and financial policies of the investee is reported as investment securities in the each separate financial statement.

Deloitte (2015) indicates that there are various categories of investment securities which are required to be sorted for classification and measurement purposes as trading securities: hold-to-maturity, available-for-sale, and non-marketable securities. Trading securities are identified of debt and marketable equity securities that are bought and held principally for the purpose of selling them in the near term. This investment reported at fair value at all times, with unrealized gains and losses included in earnings. Hold-to-maturity securities are debt securities that the firm has intention and ability to hold to maturity. This should be reported at amortized cost. Available-for-sale securities are identified as debt and marketable equity securities that are either

held-to-maturity securities or trading securities. This investment is reported at fair value at all time, with unrealized gains and losses excluded from earnings and reported in a separate component in other comprehensive income that will be classed as a component of shareholders' equity. Furthermore, IAS39 Financial Instrument s: Recognition and Measurement is applied once a firm makes investment in non-marketable securities. Since the equity securities is not marketable, its recognition and reported value should be at its cost.

Spiceland (2015) provides further guidance that the treatments of carrying value are also different regarding to its category. Even though financial assets must be reviewed for

impairment at the end of each reporting period, there is no need to test for impairment on trading debt and equity securities since all gains and losses are regularly recognized in income statements. For available-for-sale debt assets, impairment is measured as the differences between the amortized cost basis and the fair value and impairment related to credit losses is reported in the income statement. For available-for-sale equity assets, impairment is measured as the differences between the cost basis and fair value and it is also reported in the income statement. Impairment related to credit losses for hold-to-maturity investment debt assets is reported in the income statement.

Table 1: Classification and measurement of investment securities

Investment Securities	Initial recognition	Subsequent measurement	Unrealized Gain (Loss)	Financial Statement (Section)
Trading	Cost	Fair value	Temporary account	Income statement (Retained earnings)
Available-for-sale	Cost	Cost or revaluation	Permanent account	Statement of Financial Position (Shareholders' equity)
Hold-to-maturity	Cost	Amortized cost or fair value	-	-
Non marketable	Cost	Cost or revaluation	-	-

Adapt from Kovacs (2013)

The table 1 above reveals that initial and subsequent measurement at one point of accounting period, companies determine the market price (i.e., fair value) of investment

securities. If the market price is different from the book value, unrealized gains or losses should be recognized to reflect the fair value of the securities. The accounting treatment of

trading securities and available-for-sale securities is different here. Accordingly, Statement of Financial Accounting Standard 115 (SFAS115) is being the grand model of Thai Accounting Standard 105 (TAS105) Accounting for Certain Investment in Debt and Equity Securities. IASPLUS (2016) compares the difference between SFAS115 and IAS39 in comprehensive detail. However, this issue was earlier addressed by both IASB and FASB. Consequently, convergence work between the two standard setting institutions is announced. IFRS9 Financial Instruments becomes the grand model for worldwide accounting treatment of financial instrument which investment in securities is included. From 2019 onward, Thai Financial Reporting Standards 9 (TFRS9) will replace the TAS105 which covers not only investment in debt and securities but derivatives. The measurement bases for financial assets are fair value and amortized cost. It generates new classification of financial assets into two groups; Fair Value to Profit and Loss Account (FVTPL) and Fair Value to Others Comprehensive Income (FVOCI), and Amortized cost. As IFRS13 became active earlier, the revaluation model is removed. Also, FVTPL becomes the default to subsequent measurement of investment securities. The movement to fair value measurement becomes subject.

Fair Value Accounting and Earnings Management

Beatty (1995) originally concerns that classification requirement of investment portfolio management cannot eliminate opportunities to influence the numbers that are reported in the financial statement. Dechow et al (2010) concerns over discretion of the size of

gains from securitization reported through financial statement that might relate to earnings management activities. The paper reveals that firms report larger gains when pre-securitization earnings are low when pre-securitization earnings are below the prior year level. The assumption thus is verified. Liu and Yu (2013), in addition, believe that the new accounting standards of fair value might provide earnings management opportunities to listed companies. The result indicates that existence of earnings management behavior in the industry. Sodan (2015), furthermore, reviews the extent to which fair values are used in financial reports is related to the earnings quality measures in Eastern European countries. As limitation of fair value in condition, mark-to-market seems limited. Thus, the research confirmed that there is using valuation techniques (such as mark-to-model) by managers to manipulate with estimation values

Xu (2013), nevertheless, indicates that the expected outcome of using fair value accounting on investment securities is that it might prevent the chance for the accountant to deal with numbers that lead to aggressive financial reporting activities. The paper assumes that firms use earnings management to manipulate earnings number which mislead stakeholders or can hide the real firm performance of the company from shareholders when it does not meet their requirements. The result, however, provides no sufficient evidence.

Even though the method of measuring earnings management is not yet unified or being universally accepted, it is believed that fair value accounting for investment can prevent

earnings manipulation. Subsequently, this study explores this relationship by proposing hypothesis as followed.

Ho: There is an impact of fair value accounting for investment securities on earnings management.

Ha: There is no impact of fair value accounting for investment securities on earnings management.

Research Methodology

Research method of this study complies with three steps. First, the population and sample were selected. Second, the data were collected through annual registration statements. Third, research model and variable measurement are identified. Lastly, forth, the data were analyzed using multivariate data analysis.

Sample and Data Collection

This archival research identifies the

$$EM_{i,t} = \beta_0 + \beta_1 OCI_{i,t} + \beta_2 Equity_{i,t} \quad \dots\dots\dots(1)$$

Where: $EM_{i,t}$ = Earnings management of firm i at time t;
 $OCI_{i,t}$ = Unrealised gain or loss of investment securities of firm i at time t; and
 $Equity_{i,t}$ = Natural logarithm of equity as a proxy of firm size of firm i at time t.

The value of earnings management is calculated using the standard approach proposed by McNichols (2000), which based on the concept of total accrual (TA). Dechow et al (1995) indicates that total accruals is the combination of discretionary accruals (such as stock write down) and non-discretionary accruals

research population based on 100 listed companies in SET100 during 2011-2013. This research employs 174 data sets from Thai listed companies where it has been classified as SET100 throughout the period of observation. The data were collected from annual report and the Stock Exchange of Thailand. Thailand has been selected as it is one of leading capital market in ASEAN Economics Community where collection of emerging market where gathering. SET100 represents listed companies because its covers the 100 largest firms based on their market capitalization and liquidity, chosen by the Stock Exchange of Thailand.

Research Model

Multiple regressions are used to express earnings management as a function of the fair value accounting and firm size. The regression equation is as follows:

(such as an increase in debtors due to increased trading). Thus, non-discretionary accruals can measure as the residual of regress between total accruals and non-discretionary accruals. Discretionary accrual is now being proxy of earnings management, consequently

$$TA_{i,t} = NDA_{i,t} + EM_{i,t} \quad \dots\dots\dots(2)$$

Where: $TA_{i,t}$ = Total Accruals at time t of firm i at time t-1;
 $NDA_{i,t}$ = Non-discretionary accrual of firm i at time t-1; and
 EM_i = Earnings management of firm i at time t.

This approach has received warm welcome because all information needed can be obtained directly from the financial statements. The DeAngelo model indicates that NDA_t is

$$NDA_{i,t} = \frac{\sum TA_{i,t}}{n} \quad \text{.....(3)}$$

Where: $NDA_{i,t}$ = Non-discretionary accrual of firm I at time t-1; and
 $TA_{i,t}$ = Total Accruals of firm I at time t; and
 n = Number of observation.

The author also introduced basic calculation of total accruals as total accruals in current year is the value of total accruals scaled by previous

Total accruals of firm I at time t-1(Dechow et al, 1995); Healy (1985) suggests comparing mean total accrual across the earnings management partitioning variable. It can be seen as follows;

$$TA_{i,t} = \frac{\Delta CA_{i,t} - \Delta Cash_{i,t} - \Delta CL_{i,t} + \Delta Debt_{i,t} - DEP_{i,t}}{A_{i,t-1}} \quad \text{.....(4)}$$

Where: $TA_{i,t}$ = Total accruals of firm I at time t;
 $\Delta CA_{i,t}$ = Change in current asset at time t;
 $\Delta Cash_{i,t}$ = Change in cash and cash equivalents of firm I at time t;
 $\Delta CL_{i,t}$ = Change in current liabilities of firm I at time t;
 $\Delta Debt_{i,t}$ = Change in total debt of firm I at time t;
 $DEP_{i,t}$ = Depreciation and amortization of firm I at time t; and
 $A_{i,t-1}$ = Lagged total asset of firm I.

The estimation of total accruals in the current year scaled by lagged total asset of the previous year is controlled by the effect of size. This cross section data is a widely accepted for non-discretionary accruals model as a useful statistics approach to estimate earnings management because it requires further data that consist which a particular firm, compared with both statistical technique using time series models of Jones approach and qualitative method using accounting technique to evaluate quality of disclosure in identification of warning sign.

Data Analysis

Once data were collected, the process of sorting would take place. The regression implies statistical relationship, which essentially deal with random variables. Population regression function is shown as $Y_i = \beta_1 + \beta_2 X_{2i} + \beta_3 X_{3i}$. Thus, this study uses the method of Ordinary Least Squares since its assumptions is intuitively and simple.

Examine fair value accounting for investment securities.

Proclaiming of IFRS13 Fair Value Measurement in recent year is raising a concern over the treatment of all financial assets as well

as investment securities. However, the Thai Federation of Accounting Professions is launching IFRS9 Financial Instrument that has been subjected to blame on the confusion of treatment on financial assets, and derivative instruments. As subsequent measurement requires debt and marketable equity securities to be classified as trading securities in order to report

its gain or loss in earnings that make its difficulties to observe. Available-for-sale securities, however, reports its unrealized gains or losses in other comprehensive income section which makes it crystal clear to be observed. Thus, this section provides results using 174 data sets from Thai listed companies.

Table 2 Descriptive statistics of variables of main equation

	Mean	Standard Deviation	Maximum	Minimum
EM	0.000	14.689	18.129	-166.396
OCI	26.866	368.939	1,666.300	-2,119.880
EQU	9.504	0.569	11.186	8.491

(Units are in Million baht)

Table 2 reports descriptive statistics of earnings management estimation where average 0.000 took place. Maximum earnings management is estimated at 18,129,000 baht while minimum is -166,396,000 baht. Unrealized gains and losses of available-for-sale securities that have been disclosure in annual reports has the

average value at 26,865,800 baht. However, it has large dispersion since its standard deviation is 368,939,000. The maximum unrealized gain was 1,666,300,000 baht while the minimum loss was 2,119,880,000 baht. However, most of listed companies report neither gain nor loss from available-for-sale securities.

Table 3: Descriptive statistics of Earnings Management Estimation's Elements

	Mean	Standard Deviation	Maximum	Minimum
ΔCA	4,024	31,342	206,452	-162,453
$\Delta Cash$	2,120	24,279	288,750	-36,569
ΔCL	3,078	12,311	95,218	-42,353
$\Delta Debt$	4,696	17,155	116,074	-24,451
DEP	3,283	10,191	76,314	0
A	26,330	54,764	472,146	60

(Units are in Million baht)

10 วารสารเกษตรศาสตร์ธุรกิจประยุกต์

Table 3 reports descriptive statistics of earnings management estimation's elements that have been disclosed in annual reports in 2012-2013. The average current asset was 4,024 million baht with standard deviation was well over 31 billion baht. The maximum current asset was 206 billion baht while the minimum current asset was -162 billion baht. On average, listed company in SET100 reports cash 2,120 million baht even though with large dispersion (standard deviation was 24,279 million baht). The maximum cash was 288,750 million baht while the minimum cash was -36,569 million baht. Average current liabilities were 3,078 million Thai baht. The maximum current liabilities were 95,218 million baht, while the minimum

current liabilities were -42 million baht. Average total debt were 4,696 million Thai baht. The maximum total debt were 116,074 million baht, while the minimum current liabilities were -24,451 million baht. Thai listed companies reported average depreciation of 3,283million baht. The maximum depreciation was 76,314 million baht while the minimum depreciation was 0 million baht. In addition, on average, an average total asset was 26,330 million baht with standard deviation was well over 54,764 million baht. The maximum total asset was 472,146 million baht while the minimum total asset was 60 million baht.

Table 4: Correlation Matrix

	TA	NDA	EM	OCI	EQU
TA	1				
NDA	0.000	1			
EM	1.000	0.000	1		
OCI	0.017	0.000	0.017	1	
EQU	0.080	0.000	0.080	0.042	1

* Significant at 0.05

Since the data sets are paneled, correlation analysis is performed prior to the regression analysis in order to detect possible issues of multicollinearity. Table 4 shows results of the

correlation analysis. The correlation values are between 0.000 and 0.080. However, there is no other evidence of significant correlation in any variables.

Table 5 Regression analysis

	OLS regression			Fixed-effects (within) regression		
	Coefficient	Standard Error	t	Coefficient	Standard Error	t
Intercept	-19.429	19.947	-0.974	-1.77374	1.23867	-1.43
OCI	0.000	0.003	0.162	-0.00042	0.00366	-0.11
Equity	2.043	2.095	0.975	(omitted)		
Number of observation	154			154		
Adjusted R ²	0.007			0.0000		

* Significant at 0.05

Table 5 provides empirical evidence on detecting relationships between the use of fair value accounting and earnings management using model specified in Equation 1. The results reveal that there is no relationship between earnings management and unrealized gains and loss from available-for-sale securities. Thus, the research's hypothesis should be rejected. Subsequently, it can be said that using fair value accounting does not cause the relationship between earnings management and unrealized gains and loss of available-for-sale securities to be active. In addition, this research employs fixed effect regression for robustness testing. The result confirms early finding that there is no effect of unrealized gains and loss on earnings management. The finding contradicts to Liu and Yu (2013), and Sodan (2015) which found that fair value measurements has direct effects on earnings management in the Chinese, and eastern European firms. It is, however, confirmed Xu (2013) that unrealized gain or loss of invest-

ment securities has no impact on earnings management. It should however be noted that this research explores the phenomenal use of cross-section data from 100 listed companies in Thailand. The limited number of observations as well as duration of study might influence the finding. Thus, further work on this issue is further needed.

Conclusion

Comparative accounting standard between US-GAAP and IFRS on financial assets largely differ. The cooperative between the two institutions has now unified issues on classification, recognition and measurement, also disclosure issues. Fair value arrives strongly into measurement issues of financial assets; investment in securities in particular. This empirical research reveals that there is no relationship between unrealized gains and loss from the available-for-sale securities and earnings management. This finding confirms Xu (2013)

that unrealized gain or loss of investment securities has no impact on earnings management. It supports to the early claim that using fair value measurement of investment securities not only provides better information for decision making but also leaves no room for accounting manipulation.

Reference

- Beatty, A. (1995). The effect of Fair Value Accounting on Investment Portfolio Management: How Fair is it? Federal Reserve Bank of St. Louis Review, 77 (11): 25-38.
- Chea, A.C. (2011). Fair Value Accounting: Its Impacts on Financial Reporting And How It Can Be Enhanced To Provide More Clarity And Reliability of Information For Users of Financial Statement, International Journal of Business And Social Science 2 (20): 12-19.
- Dechow, P.M. Myers, L.A. and Shakespeare, C. (2010). Fair Value Accounting and Gain from Asset Securitizations: A convenient earnings management tool with compensation side-benefits. Journal of Accounting and Economics 49 (2010): 2-25.
- Dechow, P.M. Sloan, R.G. and Sweeney, A.P. (1995). Detecting earnings management. The Accounting Review 70(2): 193-225.
- Deloitte, (2015). Investments in Debt And Equity Securities (After Adoption Of IFRS 9): Key Differences Between U.S. GAAP And IFRSs [Online] [Cited 20 August 2017] [Http://www.iasplus.com/En-Us/Standards/IFRS-USGAAP/Debt-Eq-Securities](http://www.iasplus.com/En-Us/Standards/IFRS-USGAAP/Debt-Eq-Securities)
- Ernst and Young (EY). (2016). Financial Reporting Development: Fair Value Measurements. [Online] [Cited 20 August 2017] [Http://www.Ey.Com/UL/En/Accountinglink/Current-Topics-Fair-Value-Measurements](http://www.Ey.Com/UL/En/Accountinglink/Current-Topics-Fair-Value-Measurements).
- Federation of Accounting Professions (FAP) Of Thailand, (2016). Thai Accounting Standard No.105 Accounting For Debt And Equity Securities.
- Financial Accounting Standards Board (FASB) (2011). Statement of Financial Accounting Standard No.157 Fair Value Measurement, [Online] [Cited 20 August 2017] [Https://Asc.Fasb.Org/Imageroot/00/7534500.Pdf](https://Asc.Fasb.Org/Imageroot/00/7534500.Pdf)
- Greenberg Et Al (2013). Fair Value Accounting, Historical Cost Accounting, And Systemic Risk: Policy Issues And Options For Strengthening Valuation And Reducing Risk, RAND, [Online] [Cited 20 August 2017] [Http://www.Jstor.Org/Stable/10.7249/J.Ctt5hhv55](http://www.Jstor.Org/Stable/10.7249/J.Ctt5hhv55)
- Healy, (1985). The Effect of Bonus Schemes on Accounting, Journal of Accounting And Public Policy 19: 313-345.
- IASPLUS, (2016). Investments in debt and equity securities (before adoption of IFRS 9): Key differences between U.S. GAAP and IFRSs [Online] [Cited 20 August 2017] <https://www.iasplus.com/en-us/standards/ifrs-usgaap/debt-eq-securities-before-ifrs-9>
- International Accounting Standard Board (IASB), (2010). International Financial Standard 13-Fair Value Measurement, London: IASB.

- Kazmouz, B (2010) The Effect of Applying Fair Value on The Financial Statements of UK Leading Companies, University of Essex: MScThesis.
- Kieso, D.E., Weygandt, J.J., Warfield, T.D. (2014). Intermediate Accounting: IFRS Edition, 2nd Ed, Singapore: Wiley.
- Kovacs, D.M. (2013). The Role And The Application of Fair Value Accounting In The Hungarian Regulatory Framework, Phd Thesis: Corvinus University of Budapest, Hungary.
- KPMG (2015). Fair Value Measurement: Questions And Answers [Online] [Cited 20 August 2017] <https://Home.Kpmg.Com/Content/Dam/Kpmg/Pdf/2015/12/Fair-Value-Qa-2015.Pdf>
- Liu, X And Yu, Y (2013). Impact of Earnings Management of Fair Value Measurement Based on Electric Power Industry, International Business Research 6(8): 49-54.
- Masadan, W.M. Al-Omush, A. And Shiyyab, F.S. (2016). Fair Value Accounting Standard Versus The Historical Cost Principle, International Business Management 10(2): 123-128.
- McNichols, M.F. (2000). Research Design Issues in Earnings Management Studies, Journal of Accounting and Public Policy 19(4-5): 313-345.
- Parbonetti, A. Menini, A. And Magnan, M. (2011). Fair Value Accounting: Information or Confusion For Financial Markets?, Montreal; Ciano.
- Price Waterhouse Coopers. (2013). Fair Value Accounting: Is It An Appropriate Measure of Value For Today's Financial Instruments? [Online] [Cited 20 August 2017] Http://Www.Pwc.Com/Us/En/Point-OfView/Assets/Pwc_Pointofview_Fairvalue.Pdf
- Sodan, S. (2015). The Impact Of Fair Value Accounting On Earnings Quality In Eastern European Countries, Emerging Market Queries In Finance And Business (32):1769-1786.
- Spiceland, D.J., Sepe, J.F., Nelson, M.W., Tan, P., Low, B. And Low, K. (2015). Intermediate Accounting: IFRS Edition, 2nd Ed, Singapore: Mcgrawhill.
- Thai Accounting Standard. (2016). TAS105 Accounting for investment in Debt and Equity securities. [Online] [Cited 20 August 2017] [http://www.fap.or.th/images/column_1450926236/TAS%20105%20\(Update%202559\).pdf](http://www.fap.or.th/images/column_1450926236/TAS%20105%20(Update%202559).pdf)
- Thai Financial Reporting Standard. (2015). TFRS9 Financial Instruments. [Online] [Cited 20 August 2017] http://www.fap.or.th/images/column_1475549146/TFRS%209%20-Web%2028_12_59.pdf
- Xu, X. (2013). Fair Value Measurements And Earnings Management: Evidence From The Banking Industry, Syracuse University: Phd Dissertation.