

**THE EFFECT OF FAIR VALUE IMPLEMENTATION ON CASH FLOW FORECASTING
(CASE STUDY: BANKING COMPANY LISTED IN INDONESIAN STOCK
EXCHANGE YEAR 2014-2015)**

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ABSTRACT

This study has one main objectives; to investigate about the significant effect of fair value implementation in forecasting cash flow on Banking Company in Indonesia. The methodology used in this research is quantitative research, so the data are collected from secondary data by using purposive sampling technique of Banking Company's Financial Statement uploaded in Indonesian Stock Exchange which related to this research. The number of sample in this research are 36 financial statement of Banking Company in Indonesia for year 2014 and 2015 consist of 18 financial statement that implement fair value and 18 financial statement that still implement historical cost. The results of this study show that the implementation of fair value does significantly influence cash flow forecasting of Banking Company in Indonesia.

Keywords : *Fair Value, Historical Cost, Cash Flow Forecasting.*

INTRODUCTION

Background

Long time before the existence of Accounting standard, people had been living and dealing in business in their daily activities. Even only in a very simple way of business like barter (swap), it is still business. We can't deny that we deal with business matter everyday and in almost every time. And business grows day by day, from a simple business to more complicated and sophisticated business activities from time to time

Along with the growth of the business activities, people feel that they need a tool to help them to provide reliable information about how to keep business run smoothly, that tool later on will be

called as Accounting. As the initial objectives of Accounting is to help business to provide reliable information, Accounting needs to keep up with the growth of the business itself. It makes accounting develops from time to time also as business turns to be more sophisticated.

Later on, the awareness of a need of a certain Accounting Standard rose in every part of the world. Some countries formed International Accounting Standards Committee who create International Accounting Standard (IAS) or International Financial Report Standard (IFRS). IFRS maintains the goals of the Global Harmonization of Accounting Standard, and still exist till today.

The adoption of single measurement method is predicated on the belief that such a measurement will be always the most relevant and will be reliably measurable. The disclosure of relevant and reliable information is important in Accounting. The adopting of *International Financial Reporting Standard* (IFRS) is one of many efforts in improving the relevance and reliability of Financial Statement in Indonesia. The use of IFRS is not regardless of the use of Fair Value Concept (Gordon, 2015).

In Indonesia, Fair Value Concept has already arrange in Indonesia Financial Accounting Standard No. 68 about Fair Value, and already legalized in early of 2015. Others Accounting Standard had already been revised to conform those Accounting Standards with Fair Value Concept. For examples, Indonesia Financial Accounting Standard No. 16 about Fixed Assets, No. 24 about Employee Benefits, and No. 55 about Financial Instruments.

Problem Formulation

Based on the background, the problem formulation is there any effect of Fair Value Concept in forecasting future cash flow on Banking Company in Indonesia ?

Research Objectives

Based on the Background, we can simply conclude that the Objectives of this research are to explain about the effect of Fair Value Concept implementation in forecasting future cash flow on Banking Company in Indonesia.

Research Usefulness

Based on the Research Objectives, researcher hopes that by reading this proposal, any other University Students, especially Accounting Students may be able to have clearer view about the Fair Value Concept, and the effect on future cash flow of Banking Company in Indonesia. Researcher hopes that any other

researchers could use this result as their reference or supporting research to develop the science of accounting further, especially in Fair Value Concept, and the effect on future cash flow of Banking Company in Indonesia. For investors and management of business entities, researcher hopes that investors and management of business entities could use this proposal to give them a better view about the effect of fair value measurement method towards their company, and use the knowledge to support their decision making. For government, researcher hopes that government can use this proposal as a consideration for decision making, whether we have to implement PSAK no. 68 (fair value measurement) now or we still need time to adapt with the fair value measurement method by keep using historical cost method.

LITERATURE REVIEW

Signaling Theory

Signal theory put forward about how it should be a Companies provide signals to users of financial statements. Godfrey et al. (2010: 375) explains that signal carry information that may affect the process decision-making. The use of fair value in the financial statements will gives an indication of the quality of better reporting, thus giving the signal positively to companies that use fair value as the standard reporting (Weijun, 2007).

Cash Flow Statement

Cash Flow is a financial statement that contain the cash effect of Operation Activities, Investment Transactions and Financing Transactions, and also the increase or decrease in company's net cash during a period. According to Indonesia Financial Accounting Standard No 2 (2015), Cash Flow are inflows and outflows cash or cash equivalents. The Cash Flow Statement is a revision of which cash acquired by the company and how they spend it. Cash Flow Statement is

a summarizes of company's Cash receipts and disbursements during a certain period (usually one year book).

According Indonesia Financial Accounting Standard No. 2 (2015), the cash flow statement should report the current over a certain period that classified as an operating activities, investment activities and financing activities. According to Indonesia Financing Accounting Standard No. 2 (2015), there are two methods that can be conduct to prepare a cash flow statement, that are direct method and indirect method.

According to Kieso et al. (2012)H1 the benefits that can be provided by cash flow statement, are :

- The ability of the entity to generateH2 future cash flows.
- The ability of the entity to pay dividends and obligations.
- The cause of the difference between net income and net cash flow from operations.
- The investment and financing transactions involving cash and non- cash during a period.

Fair Value Measurement

According to FASB Concept Statement no 7, we can conclude that Fair Value is a price that will be received in selling assets or paying for transfer of liabilities in transaction between participants in the market and the valuation date (Perdana, 2011). Fair value measurement can be done by cost approach, income approach and market approach.

Historical Cost Method

According to Suwardjono (2008;475) Historical cost is merely the Price of the deal or trade that has been recorded in the accounting journal. Principally, historical cost method require to use acquisition cost in recording assets, liabilities, equities, and costs. Acquisition Cost is the cost of the transaction that is

agreed by the both parties included in the transaction.

Hypothesis Development

Each existing literature documents shows that the fair value have influence in predicting cash flows in the future. Fair value affect the forming income components that later on adjusted become operating cash flow, but the impact of the valuation of assets with fair value is not lost. So it can be taken the following hypothesis:

H1 : The application of the concept of fair value has a significant influence in predicting future cash flows.

H2 : The application of historical cost has a significant influence in predicting future cash flow

RESEARCH METHOD

Type of Research

The type of research conducted by the researcher is relationship research of cause and effect, research to find a causal link between independent and dependent variables. Relation that researcher want to know is the influence of the usage of fair value concept that projected with fair value accounting variable, return on asset before tax, and total assets in predicting future cash flow that projected in cash flow variable in t+1 period.

Population and Sample

The population used in this research are companies in the banking sector listed in the Indonesian Stock Exchange (BEI) 2013-2015. Banking company have become the population because the banking company has the portion of financial assets that quite a lot. Financial assets is one postal affected by fair value significantly, thus making banking company is suitable to be used as the study population.

The sampling method of this study is non-random sampling method (non-

probability sampling) that is using purposive sampling. The criteria that considered by the researcher in sampling are as follows :

1. Conventional Banking Company listed in Indonesia Stock Exchange, and not Syariah Banking

2. Adopting IFRS since 2011 and using Fair Value Measurement Or still using Historical Cost Method
3. Consistent in making financial reports from 2011 until now.

Based on these criteria there are 30 banking company that are acquired in this sampling and listed in table 1.

Table 1
Research Samples of Fair Value Measurement

No	Code	Company Name	Code	Company Name
1	AGRO	Bank Rakyat Indonesia Agro Niaga Tbk	BBMD	Bank Mestika Dharma Tbk
2	BABP	Bank MNC International Tbk	BINA	Bank Ina Perdana Tbk
3	BACA	Bank Capital Indonesia Tbk	BJTM	Bank Pembangunan Daerah Jawa Timur Tbk
4	BBNP	Bank Nusantara Parahyangan Tbk	BMAS	Bank Maspion Indonesia Tbk
5	BEKS	Bank Pundi Indonesia Tbk	NAGA	Bank Mitraniaga Tbk
6	BNBA	Bank Bumi Arta Tbk	NOBU	Bank Nationalnobu Tbk

Type and Data Source

The data used in this research is secondary data, Indonesia Stock Exchange database that are available online at sites www.idx.co.id. Empirical Model or Regression Equation that used in this research is as follows :

$$CF_{t2-t1} = a + b_1FVA_{t2-t1} + b_2PreTaxROA_{t2-t1} + b_3TotalAsset_{t2-t1} + \varepsilon$$

OBJECT DESCRIPTION

Banking Companies Description

Bank is a financial institutions which accept deposits from the people and give loans to the needy people for the purpose of consumption or investment. According to section 5(b) of the Banking Regulation Act (1949), Banking means the accepting for the purpose of lending or investment, of deposits of money from the public,

repayable on demand or otherwise, and withdraw able by cheque, draft, and order or otherwise.

Sample Description

There are about 41 Banking Companies listed in Indonesia Stock Exchange until now. The criteria that considered by the researcher in sampling are as follows :

1. Conventional Banking Company listed in Indonesia Stock Exchange, and not Syariah Banking
2. Adopting IFRS since 2011 and using Fair Value Measurement or still using Historical Cost Method
3. Consistent in making financial reports from 2011 until now.

RESULT AND DISCUSSION

Descriptive Statistics Test Result

Table 2 show the statistics of the variables used.

Table 2
Descriptive Statistics of Fair Value

	N	Min	Max	Mean	Std. Dev.
FVA	18	,633	,834	,737	,0573
Ln_Total_Assets	18	15,213	16,313	15,868	,3013
Pre_Tax_ROA	18	-,064	,019	,004	,0196
CF	18	-,154	,095	,006	,0663
Valid N (listwise)	18				

Table 3
Descriptive Statistics of Historical Cost

	N	Min	Max	Mean	Std. Deviation
HC t	18	,5338	,7340	,637522	,0572611
Ln Total Assets t	18	14,0664	17,5721	15,503906	1,0891162
Pre Tax ROA	18	,0033	,0519	,017022	,0154285
CF t+1	18	,0001	,1540	,050194	,0420856
Valid N (listwise)	18				

Classic Assumption Test Result (Data Verification)
Normality Test

The following details is the results data of normality test with non-parametric statistical Kolmogorov-Smirnov (K-S):

Table 4
Normality Test Result
One Sample Kolmogorov Smirnov Test of Fair Value

		FVA	LnTotal Assets	PreTax ROA	CF
N		18	18	18	18
Normal Parameters ^{a,b}	Mean	,737522	15,868222	,004089	,006161
	Deviation	,0572611	,3013488	,0195852	,0663226
Most Extreme Differences	Absolute	,137	,173	,337	,136
	Positive	,097	,094	,247	,117
	Negative	-,137	-,173	-,337	-,136
Kolmogorov-Smirnov Z		,579	,736	1,429	,579
Asymp. Sig. (2-tailed)		,890	,651	,034	,891

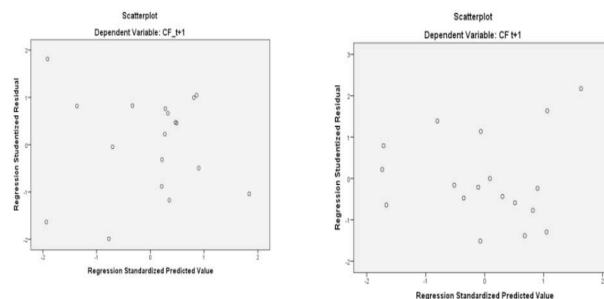
Table 5
Normality Test Result
One Sample Kolmogorov Smirnov Test of Historical Cost

		HC	Total Assets	Pre Tax ROA	CF
Normal Parameters ^{a,b}	Mean	18	18	18	18
	Std. Deviation	,637522	15,503906	,017022	,050194
Most Extreme Differences	Absolute	,137	,143	,328	,228
	Positive	,097	,143	,328	,228
	Negative	-,137	-,118	-,187	-,117
Kolmogorov-Smirnov Z		,579	,607	1,392	,966
Asymp. Sig. (2-tailed)		,890	,855	,042	,309

a. Test distribution is Normal.
 b. Calculated from data.

Heteroscedasticity Test

Heteroscedasticity test performed by seeing the pattern of deployment points on the scatterplot graph. If the point gather in a certain pattern then there are indications of heteroscedasticity. A good regression can be done when there is no indication of heteroscedasticity that marked with spread point without forming a pattern on a scatterplot graph. The following is the results of heteroscedasticity test using scatterplot graph:



Multicollinearity Test

This following is the result of multicollinearity test from variables used by the researcher:

Table 6
Multicollinearity Test of Fair Value Coefficients^a

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
FVA	,519	1,929
Ln Total Assets	,709	1,410
Pre Tax ROA	,661	1,513

a. Dependent Variable: CF

Table 7
Multicollinearity Test of Historical Cost
Coefficients^a

Model	Collinearity Statistics	
	VIF	
1 (Constant)		
HC	,785	1,275
Ln Total Assets	,425	2,353
Pre Tax ROA	,416	2,404

a. Dependent Variable: CF

Multiple Linear Regression Analysis

Here are the result of regression analysis conducted by researcher :

Table 8
Multiple Linear Regression Analysis of Fair Value
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1,045	,749		-1,395	,185
FVA 1	,722	,331	,624	2,184	,046
LnTotalAssets	,033	,054	,148	,605	,555
PreTaxROA	,655	,856	,193	,765	,457

a. Dependent Variable: CF

Model	Standardized Coefficient		t	Sig.
	Std. Error	Beta		
(Constant)	,198		1,535	,147
HC	,204	-,114	-,412	,686
Ln Total Assets	,015	-,332	-,881	,393
Pre Tax ROA	1,038	-,047	-,124	,903

From the regression analysis, we get the result for each variable coefficients to establish the regression equation. The regression equation established is as follows :

$$CF_{t2-t1} = a + b_1 FVA_{t2-t1} + b_2 PreTaxROA_{t2-t1} + b_3 TotalAsset_{t2-t1} + \epsilon$$

$$CF_{t2-t1} = -1,045 + 0,722 FVA_{t2-t1} + 0,655 PreTaxROA_{t2-t1} + 0,033 LnTotalAsset_{t2-t1}$$

and

$$CF_{t2-t1} = 0,305 + 0,084 FVA_{t2-t1} - 0,128 PreTaxROA_{t2-t1} - 0,013 LnTotalAsset_{t2-t1}$$

Table 9
Coefficient Correlation and Coefficients Determination Analysis of Fair Value

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,592 ^a	,350	,310	,0551055

a. Predictors: (Constant), FVA

b. Dependent Variable: CF

Table 9
Coefficient Correlation and Coefficients Determination Analysis of Historical Cost

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,395 ^a	,156	-,024	,0425977

Hypothesis Test (F Test)

Table 10
F Test Result of Fair Value

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,031	3	,010	3,218	,055 ^b
	Residual	,044	14	,003		
	Total	,075	17			

a. Dependent Variable: CF

b. Predictors: (Constant), PreTaxROA, LnTotalAssets, FVA

F Test Result of Historical Cost

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	,005	3	,002	,865	,482 ^b
	Residual	,025	14	,002		
	Total	,030	17			

a. Dependent Variable: CF

b. Predictors: (Constant), Pre Tax ROA, HC , Ln Total Assets

Research Result Implication
Normality Test Result Kolmogorov-Smirnov

From this result both fair value measurement and historical cost method test result shows that the data distribution of each variable is normal because it has

the significant level above 0,05, except for the PreTaxROA of both that has significant level below 0,05 that are 0,034 for PreTaxROA of Fair Value Measurement case and 0,042 for PreTaxROA of Historical Cost Method case.

The Normality of the data also has been tested by Histogram and P-Plot diagram, which shows that both case has the normal data distribution, described by the form of residual skewness that moves like a bell, and also the p-plot diagram of both case shows the normality of data distribution described by the deployment of the plot near the diagonal line existed from the chart.

Heteroscedasticity Test

From both case test result shows that there is no indication of heteroscedasticity, it described by seeing the pattern of deployment point on scatterplot graph which is spread out and not forming a pattern.

Multicollinearity Test

The result of this test from both case shows that there is no indication of multicollinearity, because each independent of both method historical cost and fair value measurement has tolerance value above 0,1 and VIF lower than 10 point.

Multiple Linear Regression Analysis

This analysis will show that whether each independent variable is significant enough or not to impact the dependent variable. In these cases, the independent variables are PreTaxROA, LnTotalAssets, and FVA or HC and the dependent variable is CF. From both test, fair value measurement case shows that, it is significant enough because the coefficient number are big to give the effect to cash flow forecasting. But, from historical cost case, it is not significant enough because the coefficient number are small. Also both cases has the opposite effect to

dependent variable, for each independent variable.

Hypothesis Test (F Test)

From the F test result, the fair value measurement case shows that all independent variables has significant effect towards dependent variables, it proved by the formula that if $F_{count} > F_{table}$ ($3,218 > 3,16$), then the hypothesis is accepted. But the historical cost case shows that all independent variables has not significant effect towards dependent variable, proved by the formula that if $F_{count} < F_{table}$ ($0,865 < 3,16$), then the hypothesis is rejected.

CONCLUSION

Conclusion

Based on the analysis and discussion of the data that has been tested, then it can be concluded that :

1. Usage of the fair value concept has effect in forecasting cash flows in the future at the banking company in Indonesia.
2. And the usage of historical cost has no effect in forecasting cash flow in the future at banking company in Indonesia.
3. This study does support the results of previous research.

Research Limitation

The limitations faced by researchers in conducting research are as follows:

1. The period of investigation is limited to only 2011 to 2015 because the banking company in Indonesia just apply IFRS, in this case the concept of fair value in 2011, and the last audited financial statements are published is year 2015, so the researcher cannot investigated future cash flow CF, for year 2016.
2. Researchers use only the usage of the concept of fair value and historical cost in researching its impact on forecasting cash flows and ignoring other factors

- which can affect cash flow forecasting as well.
3. The several cash flows data of banking companies in Indonesia is very unstable, it is making the researcher difficult to determine the issues that affect cash flows forecasting.
 4. The study population is confined to the banking company only, so research result only limited to the banking company as well.

REFERENCES

- Barley, Benzion, Joshua Rene Haddad. *Fair Value Accounting and The Management of The Firm*. Critical Perspectives on Accounting Vol. 14, pp 383-415. 2003.
- Barth, 1994, "Fair Value Accounting : Evidence from Investment Securities and the Market Valuation of Banks" *The Accounting Review*. hal 1
- Barth, 1997, "Are bank's SFAS No. 107 fair value disclosures relevant to investors?" *Bank Accounting & Finance*, hal 9
- Bratten, Brian, Monika Causholli, dan Urooj Khan, 2014, *Usefulness of Fair Values in Predicting Future Cash Flows and Earnings*. Paper on 23rd annual seminar, University of Kentucky.
- Godfrey, J., Hodgson, A., Tarca, A., Hamilton, J., Holmes, S., 2010. *Accounting Theory (7th ed)*. USA: Willey.
- Gordon, Josua, *Pengaruh Penerapan Konsep Nilai Wajar dalam Memprediksi Arus Kas Perusahaan yang Terdaftar di BEI*. Skripsi diterbitkan. Universitas Sumatera Utara. 2015
- Ikatan Akuntan Indonesia, 2015, *Standar Akuntansi Keuangan*, Jakarta: Salemba Empat
- IASB, *Discussion Paper: Fair Value Measurement Part 1 – Invitation to Comment and Relevant IFRS Guidance*, London: IASB, 2006.
- Kieso, Don, Jerry Weygant dan Terry Warfield, 2012. *Intermediate Accounting*, USA : John Wiley & Sons
- Maria, I. Silvyana. *Analisis Perbandingan Model Fair Value dan Model Historical Cost serta Penerapannya Terhadap Aset Tetap (Studi Kasus pada PT Sidomulyo Selaras Tbk)*. Skripsi diterbitkan. Universitas Gunadarma. 2011.
- Nurainie, Rini, Kania Nurcholisah, Edi Sukarmanto. *Analisis Perbandingan Penerapan Fair Value Dengan Penerapan Historical Cost Terhadap Kualitas Informasi Akuntansi Pada Perusahaan Sekuritas*. Paper Penelitian SPeSIA 2015.
- Shortridge, 2006. "Fair – Value Accounting : Analyzing The Changing Environment" *The CPA Journal*, hal 37.
- Sing, Ting Yieng, Soo Choon Meng. *Fair Value Accounting-Relevance, Reliability, and Progress in Malaysia*. Desember 2005.
- Sonbay, Yolinda Yanti. *Perbandingan Biaya Historis dan Fair Value*. Kajian Akuntansi Vol. 2 No.1, pp 1-8. Februari 2010.
- Stephen H. Penman. *Accounting and Business Research Special Issues: Financial Reporting Quality: is Fair Value a Plus or a Minus*. (2007).
- Strouhal, Jiri. *Historical Costs or Fair Value in Accounting : Impact on Selected Financial Ratios*. Journal of Economics, Business and Management, Vol. 3 No. 5. May 2015.

- Suwardjono. *Teori Akuntansi: Perekayasaan Laporan Keuangan*. Yogyakarta: BPF, (2008).
- Tim Krumwiede, CPA. *Strategic finance: Why Historical Cost Accounting Make Sense*. Agustus 2008.
- Wallison J. Peter. *Fair Value Accounting : A Critique*. American Enterprise Institute for Public Policy Research. July 2008.
- Weijun. 2007. *The Effect of Fair Value Accounting in HKAS 40 on Real Estate Companies Listed in Hong Kong*. (Online), (www.ssrn.com, diakses pada 10 November 2015).
- Wiyani, N. T. 2012. Standarisasi, Harmonisasi dan Konvergensi IFRS. (Online)(<http://staff.blog.ui.ac.id>, diakses pada 10 Januari 2015).
- Watts, R.L., Zimmerman, J.L. *Towards a Positive Theory of the Determination of Accounting Standard*. The Accounting Review. Vol. L111.No.1.pp:112-143. 1978.

