# ANALYSIS OF BIOLOGICAL ASSETS VALUATION WITH FAIR VALUE ACCOUNTING AND HISTORICAL COST ACCOUNTING METHOD IN PLANTATION SUBSECTOR OF INDONESIAN AGRICULTURAL INDUSTRY IN THE PERIOD OF 2007-2012

By

Karina Putri Ramadhani 13410101

A thesis submitted to the Faculty of

## **BUSINESS ADMINISTRATION AND HUMANITIES**

Department of

**ACCOUNTING** 

in partial fulfillment of the requirements

for the

BACHELOR'S DEGREE

in

BUSINESS ADMINISTRATION



SWISS GERMAN UNIVERSITY
EduTown BSD City
Tangerang 15339
Indonesia

July 2014

Revision after the Thesis Defense on July 19th, 2014

Page 2 of 89

# STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

Karina Putri Ramadhani	
Student	Date
Approved by:	
Indra Pratama MM,Ak.,CA,CMA,CPMA	
Thesis Advisor	Date
Prof. Eric Jos Nasution MBA, MA, Phd	
Dean	Date

#### **ABSTRACT**

ANALYSIS OF BIOLOGICAL ASSETS VALUATION WITH FAIR VALUE
ACCOUNTING AND HISTORICAL COST ACCOUNTING METHOD IN
PLANTATION SUBSECTOR OF INDONESIAN AGRICULTURAL INDUSTRY IN
THE PERIOD OF 2007-2012

By

Karina Putri Ramadhani Indra Pratama, MM,Ak.,CA,CMA,CPMA

### SWISS GERMAN UNIVERSITY

The analysis of biological assets valuation with fair value accounting and historical cost accounting method in plantation subsector of Indonesian agricultural industry, in the period of 2007-2012, tries to evaluate the relevance of historical cost towards the fair value of biological assets. It also tries to look for empirical evidence on the differences in calculations on biological assets between FVA and HCA toward company's EBIT, net income, and potential tax liabilities. The research tests 5 companies within the plantation subsector in agricultural industry listed in Bursa Efek Indonesia (BEI). This study shows that there is a strong correlation between all variables tested. Among all statistical tests conducted, all hypotheses are rejected. This study concludes that the historical value of biological assets does not represent its real fair market value, or irrelevant. Also, the change in biological assets valuation from historical cost to fair value accounting would significantly affect the company's EBIT, tax expense, and net income.

Keywords: Fair Value, Historical Cost, Agricultural Industry, Plantation, Fair Market, EBIT, Tax Expenses, Net Income.

Page 4 of 89

© Copyright 2014 by Karina Putri Ramadhani All rights reserved

Page 5 of 89

# **DEDICATION**

For my family and friends.

#### **ACKNOWLEDGEMENTS**

First, I would like to thank Allah SWT for the endless blessings, my parents, and my sisters for the continued support and encouragement.

Second, I cannot express enough thanks to my thesis advisor, Mr. Indra Pratama, without his guidance, this thesis will not be as fancy as this. I would also like to thank all the accounting lecturers, Ms. Neneng, Mr. Yosman, Mr. Sam, Ms. Liana, Ms. Lingga, Ms. Innge, Ms. Gita, Mr. Nurdayadi, and Mr. Bobby for the patience in teaching us, especially me.

My completion of this work could not have been accomplished without the support from all of my accounting classmates, especially my thesis mates, Erica, Cissy, and James. Good luck to all of us. I also would like to thank Rhivaldy Adhietya for the discussion about this thesis.

Finally, to my currently favorite person on earth, Moechammed Riezky, thank you for everything. Thank you for being so loving, caring, funny, and awesome. Man, aren't you something else?

# **TABLE OF CONTENTS**

ABSTR	RACT	3
DEDIC	ATION	5
ACKN	OWLEDGEMENTS	6
TABLE	E OF CONTENTS	7
LIST O	F FIGURES	9
LIST O	F TABLES	10
CHAPT	TER 1 – INTRODUCTION	21
1.1.	Background	11
1.2.	General Statement of Problem Area	15
1.3.	Research Objectives.	18
1.4.	Research Problems.	19
1.5.	Significance of Study	19
1.6.	Research Questions and Hypothesis.	19
1.7.	Scope of work & Limitations	20
1.8.	Thesis framework	20
CHAPT	ΓER 2 – LITERATURE REVIEW	21
2.1.	Framework of Thinking	21
2.2.	Agriculture and Plantation	22
2.3.	Fair Value	26
2.4.	Historical Cost Accounting	29
2.5.	Fair Value Accounting	30
2.6.	Ebit & Net Income	33
2.7.	Income Taxes	34
2.8.	Previous Research.	35
2.9.	Differences in Research	42
CHAPT	TER 3 – RESEARCH METHOD	44
3.1.	Research Process	44
3.2.	Type of Study	44
3.3.	Unit of Analysis	45
3.4.	Research & Questions Design	45
3.5.	Population and Sample	46

		Page 8 of 89
3.6.	Sample Analysis	
3.7.	Sample Size	48
3.8.	Type of Data	49
3.9.	Data Collection	49
3.10.	Data Analysis	49
СНАРТ	ER 4 – RESULT AND DISCUSSION	54
4.1.	Company Profile	55
4.2.	Classical/Basic Assumption Testing	56
4.3.	Hypothesis 1	57
4.4.	Hypothesis 2	60
СНАРТ	ER 5 – CONCLUSION AND RECOMMENDATION	71
5.1.	Conclusion	71
5.2.	Recommendation	71
GLOSS	ARY	71
REFER	ENCES	73
APPEN	DICES	80
CURRI	CULUM VITAE	88

Page 9 of 89

# LIST OF FIGURES

Figures	Page
Figure 2.1: Framework of Thinking	21
Figure 2.2: Biological Assets Classification	25
Figure 3.1: Research Process	43
Figure 4.1: Scatter Plot- Pearson Correlation EBIT	67
Figure 4.2: Scatter Plot- Pearson Correlation Tax Expense	68
Figure 4.3: Scatter Plot- Pearson Correlation Net Income	68

# LIST OF TABLES

Table	Page
Table 1.1: Samples of Issues on Various Fair Value Standards	16
Table 1.2: Examples on Agricultural Products	17
Table 2.1: Biological Asset, Agriculture Produce and Products	28
Table 2.2: Advantages and Disadvantages in IAS 41	32
Table 2.3: Selected Previous Research	35
Table 3.1: Research Variables and Scales	46
Table 3.2: Agricultural Plantation Companies at BEI	47
Table 3.3: Sampled Agricultural Companies Since 2007 or Before	48
Table 3.4: Sampled Agricultural Comapnies Since 2007 or Before	48
Table 4.1: Validity Test's Result	56
Table 4.2: Paired Samples Correlations Result on HCA and FVA	56
Table 4.3: Biological Asstets Value Under HCA and FVA	57
Table 4.4: Result of Paired Samples Test on HCA and FVA	58
Table 4.5: Paired Samples Correlations Result on EBIT	60
Table 4.6: Changes in EBIT due to Biological Assets Valuation	60
Table 4.7: Paired Samples Correlations Result on Tax Expense	61
Table 4.8: Changes in Tax Expense due to Biological Assets Valuation	61
Table 4.9: Paired Samples Correlations Result on Net Income	63
Table 4.10: Changes in Net Income due to Biological Assets Valuation	63
Table 4.11: Paired Samples Test Result on EBIT, Tax Expense and Net Income	64
Table 4.12: Pearson Correlation Statistic Result on EBIT	66
Table 4.13: Pearson Correlation Statistic Result on Tax Expense	66
Table 4.14: Pearson Correlation Statistic Result on Net Income	66
Table 4.15: Regression Linear Result on Net Income	69