AN ANALYSIS OF ACCOUNTING TREATMENT FOR AGRI-COMMODITY DERIVATIVES UNDER IFRS

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ABSTRACT

IFRS 7 and 9 have requirement, for recognition, measurement and disclosure of derivatives. Derivatives include futures and options for hedging foreign currency risks, interest rate risk, price risk etc. Derivatives include financial and commodity derivatives, commodity derivatives are of recent origin, they include commodity futures traded in commodity markets. The requirements under IFRS 7 and 9 can be applied to commodity derivatives. The aim of the present study is to codify the requirement, for recognition, measurement and disclosure of commodity derivatives by Agri-business and Agri-process companies. The data were collected from annual reports of sample companies. Research instrument consists of requirements of recognition, measurement and disclosure index which has been formulated as per IFRS . Data were collected by content analysis method and analyzed using descriptive statistics .The results of the study reveals that of the information of Agri-commodity derivatives recognition, measurement, disclosure in the annual reports is very low level.

Keywords*: Derivatives, Agri-Commodity derivatives, Recognition, Measurement, Disclosure.*

Introduction:

Higher volatility in commodity Price make it hard for businesses and producers to estimate their future revenues. Derivative instruments provide them a valuable set of tools for managing this risk through exchanges. The first organized commodity derivative exchange was traced as early as in year 1865 at Chicago. Since then it has experience an unprecedented boom which can be evidence in the growth of the number of exchange, number of commodities traded and outstanding contract. It because all the the players of the market including speculators use this instrument because of high yield with moderate risk in commodity derivative compare to other class of instrument. Another major reason is the companies is using this instrument for hedgeding their price risk against increased high volatility which is existing in the current market condition.

Today all major countries in the world are striving to have strong policy regarding food security because there have been drastic decreases in the agricultural production because it includes many factors, in that lack of substantial price for the products are also have greater implication in this problems. This can be effectively managed by the use of Agri-commodity derivatives, were this instruments helps in effective price discovery and price risk management at th time of volatile price fluctuation and it also integrated price structure throughout the the country by eliminating unforeseen price change in the agricultural products. Hence Agri – commodity derivatives gets major attention because it can be used to solve major problems of the agricultural sector which are become very critical, has it is fundamental sector and performance of this can have direct implication on other sector.

Companies also use derivatives because it's wide spread nature and it can be easily adopted to any instrument with following minimum criteria. This benefit of the derivative has made it to use by the wide spread in all activities of the entities. So today derivatives have conquered the huge amount of the space in the companies financial activities. Has derivatives can be used by the companies easily because of this added advantage compare to other instrument and this advantage as only created

complexity because of its nature of origin. So It has left many reporting entities hard-pressed to apply standardized accounting practices consistently. This has thrown the new challenge to the accountant to analysis this derivative transaction and records them.

Accounting practices for derivative has been updated due to inconsistency and lack comparability among companies and it may inducing nasty accounting errors which includes inappropriately placed and not adequately recognized which leads to "huge-scale fraud" in the companies, future Warren buffect describes in this letter to shareholder described the derivatives has the " weapon of mass destruction" with some examples how the companies are occurred loss with the use of this instrument, so this problems can be reduced by having a strong accounting practices for derivatives. Hence IASB has issued both IFRS 7 and 9 to improve the confidence and transparency of this instrument with major objective is to disclose all the relative information in the annual report. But till also there is an evidence of issues in the accounting practices of the derivatives.

Now also after the issue of this standard accounting practices for derivatives is incomplete, inconsistent, complex, not transparent and this problem are most evident in Agri-commodity derivatives because additional uncontrollable external factors influencing the underlying assets.

Future study made by *AIMR* in 2001 reveals the perception of the users regarding derivatives gives "Analysts evaluating the statements and related notes with the goal of understanding the firm's risk positions, derivative use, management strategies, and the implications for the firm's future risk profiles and profitability will have to look well beyond the specific accounting method chosen to the apparent economics underlying the transactions. This assessment will be critically dependent on both the quantity and quality of disclosure that management chooses to provide" from it can be evident that users need much detailed information about derivatives has it can create substantial biased with decreased disclosure.

So aim of the present study is to analysis the requirement for recognition, measurement and disclosure of commodity derivatives by Agri-business companies by making the standardized check list by taking into consideration of established standard for derivative instrument in IASB.

Review of Literature:

Agri-commodity derivatives are of recent origin with their importance in companies are coming through in recent years. Accounting practices for this instrument was most focused when companies incurred losses by using this instrument. Hence importance for increased transparency in recognition measurement and disclosure was initiated. Today studies focused on this but not exclusively on the agri- commodity derivatives because of its recent origin. This review gives to obtain a sound foundation and theoretical framework for the study by going through published research work in this area.

Rodrigues (2006): This study was conducted to know the disclosure level of the finical instrument in their annual report of companies which are listed in the Portuguese stock exchange. The main focus area of this is to identify the factors associated with the level of financial instrument disclosure and features of companies that are closest to IAS 32 and IAS 39 requirement. For this study 8 independent and 11 dependent variables are consider from annual report of the companies by using content analysis technique for selecting the variables. Analyses of the results are made by applying descriptive statistics considering both simple and multiple regressions. Result conclude that disclosure degree is significantly related to size, type of auditor, listing status and to the economic sector, it also reveals several problems for compliances with IAS IFRS because lack of effective enforcement mechanisms and different accounting practices by the companies.

Lopes (2007): The study focus on the recognition and measurement of the electricity derivative under IAS 39 which is launched by MIBEL Derivatives market. Standard is complex in the term of understand and it consequently its effect implementation of this standard. Electric derivatives can recognize under the commodity contract type for this it should be determine whether it fall within the scope of IAS 39. Mark to market Accounting and Hedge Accounting are briefly analysis to consider how they are recognized, measured, and presented in the income statement with different cases showing the differential impact on the income statement with different methods. It concludes there are major challenges in accounting practices with comparability in financial instrument.

Marginson (2010): The main theme of the article is to analysis the accounting practices for derivatives and financial instrument by considering all accounting concepts and convention which will make better usefulness of the report to the external users. This paper aims to assess the quality of the disclosures under FRS 13 extent to which they help the user to assess a companies attitude to risk and measure the actual or potential financial impact of its use of derivatives. The study was divided into two main concepts to measure the disclosure level of derivatives instrument i.e. narrative disclosure and numerical disclosure has both will come under the standard. For this content analysis method applied to secondary sources. The finding suggest that the narrative disclosure are generic in nature, the numerical data incomplete and not always comparable, and that it is difficult for the user to combine both narrative and

numerical information in order to assess the bank risk expose.

Middelberg(2011): Researcher in this work had identified accounting implication of commodity derivatives in agricultural sector of south Africa with the main objective is to interpret and application of IAS 39 in the commodity derivatives with several secondary objective, as obtaining general information regarding use of Agri-commodity derivatives in their risk management, identify various transaction types utilized by South African agribusinesses and processors and to consider the impact IFRS statements on the agribusiness and processors' financial operations. Methodology used are case study method in the context of the agribusiness industry, by taking seven companies on the basics of convince sampling techniques and conducting interviews of the auditing firms of above companies. From study nine important transaction types has been identified in agricultural derivatives were accounting treatment for transaction are evaluated with in scope of IAS 39. Findings of study had made several insights for accounting practices for agri-commodity derivatives and conclude as this can serve benchmark and best practices for South African agribusinesses, processors and auditors.

Research Gap:

Accounting for Agri-derivatives comes broadly under IFRS 7 and 9, was issued by the International Accounting Standard Board (IASB) with an objective to establish principal for recognizing, measuring and disclosure of financial instrument. But this standard has wide range which includes derivatives. This standard does not have standardized rule which can be applied for derivatives hence it is comprehensively recognized, measured and disclosed in the reports of the companies. Existed difficulty in accounting practices for derivatives can be evident in literature review were it shows bigger amount of issues in recognition, measurement and disclosure in the instrument which leads to complexity and lack of understandability about derivatives so in this study we are analysis the factors which are leading to complexity.

Problem Statement:

Materiality and understandability are the center issues in the every report because financial position and performance of the companies can be effectively measured using this concept. When entities oriented towards agricultural activities as their core area. Much space must given to derivatives in their report has subject to above concept. But in current practices companies haven't shown such importance, more over when these companies are using the complex instrument like derivatives in its activities were the potential of loss are high. Hence there is the greater implication in analysis recognition, measurement and disclosure practices made by these companies regarding Agri-commodity derivatives in their report.

Objectives:

1. To identify and codify the requirement for recognition, measurement and disclosure of Agri –commodity derivatives under IFRS.
2. To study the current for recognition, measurement, and disclosure of Agri-commodity derivatives by companies.

Hypothesis:

The following hypothesis was formulated for testing in this study

H_1: There exist difference in the requirement for and current practices for recognition, measurement and disclosure of Agri-commodity derivatives by companies.

Methodology:

Sample:

Sampling:

Companies were selected on basis of convenience sampling.

Criteria for selecting companies are:

a. Companies were doing Agri-business.
b. They were adapted to IFRS.
c. They used Agri-commodity derivatives for hedging purpose.

Companies selected for the study:

a. AFRI Limited.
b. NWK Limited.
c. SENWES Limited.
d. TONGAAT HUlETT STARCH Limited.

Data collection for content analysis method:

The data is collected from the annual report of companies for the period of one year i.e. 2011. Both quantitative and qualitative data are codified to achieve the research objective using the index in the form of a questionnaire prepared on the basis of the existed accounting standard.

Research Instrument:

Both quantitative and qualitative data are quantified to achieve the research objectives using the compliance index. An information item is scored one when disclosed and a score of zero is given for items that are not disclosed by the sample companies.

Data analysis:

The collected data were processed and presented in the form of tables and figures, the analysis was made with help of relevant statistical and mathematical tools such as Statistical package for social science (SPSS)

was used for the statistical analysis of data. Descriptive statistics including measures of central tendency and t-test has been used to measure the data.

Testing of Hypothesis:

Testing of hypothesis to know the Three exist difference in the requirement for and current practices for recognition, measurement and disclosure of Agri-commodity derivatives of sample companies.

The following hypothesis is formulated and tested by assuming 0.75 as hypothesized mean for one sample t-test.

H_0: "There exist difference in the requirement for and current practices for recognition, measurement and disclosure of Agri-commodity derivatives by companies"

H_1: "There does not exist difference in the requirement for and current practices for recognition, measurement and disclosure of Agri-commodity derivatives by companies"

Table 1: Results of one sample t-test of the sample Companies for the standardized check list

Companies	Hypothesized mean	Mean	P value
Senwes	0.75	.41	0.00*
Tongaat	0.75	.32	0.00*
Afri	0.75	.27	0.00*
Nwk	0.75	.27	0.00*

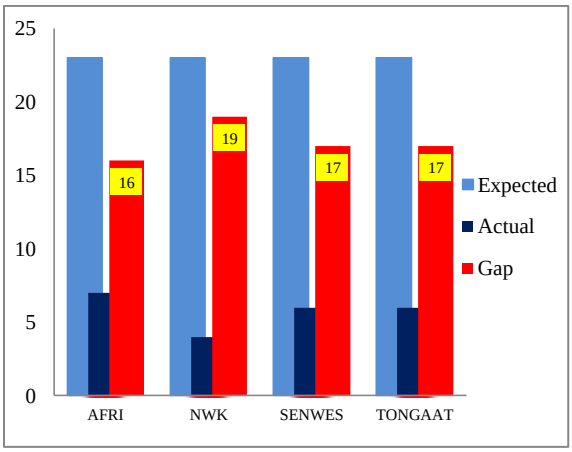
*P value is significant at < 0.75 level. P value is insignificant at > 0.75 level

The result of one Sample t-test with test value of 0.75 is given in the table as standard benchmark value for accepting hypothesis. Were accepts the hypothesis when p value above 0.75 or rejects when p value below 0.75. The result accepts the null hypothesis and rejects the alternative hypothesis as the significance values associated with the all sample companies are below 0.75. and mean value stands between all sample companies from .41 to .27 with having a small amount of variation of only .14. Hence There exist difference in the requirement for and current practices for recognition, measurement and disclosure of Agri-commodity derivatives by companies.

Table2: showing of companies actual items disclosed against expected items in the sample companies

Companies	Expected items	Actual items	Gap	Percentage
Senwes	22	9	13	41%
Tongaat	22	7	15	31%
Afri	22	6	16	27%
Nwk	22	6	16	27%

Chart 1: Bar Graph showing expected results against actual for the year 2011 of the sample Companies



The above chart shows the comparison between expected requirements in the annual report against actual result. By having the bench mark level of 75% as high level of disclosure in the report and below 75% is consider low level of disclosure regarding the Agri-commodity derivatives in the report. But result shows higher percentage of gap compare to actual were gap only accounts more than 60% in all the sample companies.

Findings:

Information on derivatives activities is disclosed in two main places in the annual report: Accounting policies and Notes to the financial statement. Accounting policies typically contain qualitative information, covering issues like management objective, policies and strategies which support the use of derivatives with brief description of the existences risk management system. The qualitative information were presented in the notes to the financial statement with statement showing the numerical details. From both the current accounting practices level can be examined.

For this purposes statistical t-test was conducted to analysis the data which was reported in the sample companies by having expected benchmark level of 75%, but result of the study shows that all four companies in the sample have disclosed information below that required benchmark this can evidenced in table 1 where p value of all the companies stands at 0.00* showing low level of compliance. Were highest mean value of .41 in SENWES were it have score of 9 out of 22 in the checklist and lowest was with the mean of .27 in both NWK and AFRI were its score stands at 6 and the average score stands at 7 in all sample companies.

Further it can be testified in bar graph 1 were it shows the expected score against actual with existed gap in

the companies and it shows more than 60% of gap in current accounting practices than actual.

From this analysis it is manifested that companies report contains low level of recognition, measurement and disclosure regarding Agri-commodity derivative in both qualitative and quantitative information in the current accounting practices under prescribed standard.

Suggestion:

Companies must give important to increase the Materiality and comparability of financial statements with regard to Agri-commodity derivative this can be achieved by both including IASB through forming separate standard for the derivatives. Has it can reduced complexity and biased in existing accounting practices leads to increased confidence and transparency in the derivative instrument.

Conclusion:

The increased complexity in the derivative instrument is because of not having standardized methods for recognition, measurement and disclosure which can be evidenced in the analysis made by the sample companies were its had existed higher percentage of gap compare to actual disclosure and highest level of compliance stands at 41% only shows low level of requirement. From this information users cannot evaluate firms risk positions, management strategies and future risk implication of derivative, so this as created lack of confidence and transparency in the derivatives which as made it as complex instrument. Hence there is the need for having the standardized accounting practices which will enables the users to compare statements and determine the risk profile in terms of derivatives. By this Agri-commodity derivative can used to solve the critical problems like price volatility and price discovery of the agricultural products.

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APPENDIX

Check List for Accounting Practices for Agri-Commodity Derivatives under IFRS

SN	Particulars
	QUALITATIVE INFORMATION
1.	Information about nature of risk exposure in industry.
2.	Factors affecting commodity price risk.
3.	Management objectives for using Agri-commodity derivatives.
4.	Which type of derivatives with reason for selection.
5.	Transaction types identified in commodity derivative contracts.
6.	Information about harvesting period of the underlying asset.
7.	The estimation upper bound of potential losses associated with the use of Agri-Commodity derivatives.
8.	Under which classification of financial instrument is derivatives are classified.
9.	The method of recognition of the derivatives
10.	Specifics about the entity purposes of de-recognition.
11.	information about which method is used for measurement (i.e. amortized cost or fair valve).
12.	Information about Magnitude of the hedged versus unhedged exposure.
13.	Reason for applying hedge accounting.
14.	Criteria taken into consideration to qualification for hedge accounting.
15.	When derivatives are designated as a hedging instrument details about under which category it is recognized.
	QUANTITATIVE INFORMATION
16.	Additional voluntary disclosures with related to Agri-Commodity derivatives.
17.	Statement showing division of recently recognized with existing contracts.
18.	Quantum of current holding of derivative instrument.
19.	Comprehensive statement showing any change from previous year to current year with details in notes to account.
20.	Statement showing total number of derivatives classified as hedging and trading purpose.
21.	Comparison of total number of agri-commodity derivatives with non agri-commodity derivatives.
22.	Statement showing total number of contracts outstanding for maturity.

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