

Study on Hedge Accounting Disclosure Practices under Annual Reports and XBRL Instance Documents

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Abstract

XBRL is an e-language for e-communication of businesses and financial data for business reporting. All companies around the world are working to increase transparency in their financial reports. By using XBRL companies can increase their comparability and transparency of financial statements by reducing the overall cost of preparation. XBRL instance documents is both human and machine-readable with a low cost of preparation and presentation, where as annual financial reports is only human-readable and higher cost of preparation. This paper mainly concentrates on comparing the disclosure level of hedge accounting information under XBRL instance documents and annual financial reports. To achieve the above objective Infosys IT Company was taken as a sample by using a convenience sampling method and paired t-test was applied to know the hedge accounting disclosure differences between XBRL instance documents and annual financial reports. T-test result shows disclosure level of hedge accounting is more under XBRL instance documents than annual financial reports.

KEYWORDS: XBRL, Derivatives, Hedge accounting, financial statements.

INTRODUCTION

XBRL (eXtensible Business Reporting Language) is a language for exchanging business and financial data electronically. It's also an open, royalty-free software specification that was developed through a global collaboration of accountants and technologists, and it offers significant advantages in the preparation, analysis, and exchange of business data. XBRL is not an accounting standard; rather, it provides a standard for the financial community to generate, publish, interchange, and extract financial statements electronically and automatically.

Financial statements are a vital part of economic life. Through XBRL an entity can prepare digital, unambiguous, accurate financial statements by reducing the cost of preparation and analysis of financial statements; it also decreases the manual input burden and entry mistakes. The financial statement users can view an XBRL report as easily as browsing a web page and also XBRL financial report contains more information disclosure than an annual audited financial report.

Hedging is deferrer from hedge accounting, hedging means a risk management strategy in which a firm employs a derivative or similar instrument to offset future changes in the

cash flows or fair value of an asset or liability. Changes in the fair value or cash flows of financial instruments are offset by changes in the fair value of a paired hedge in hedge accounting. Cash flow hedge, net investment hedge and fair value hedge are the three main types of hedge accounting. Although XBRL is not a new accounting/reporting standard, it improves the reporting and readability of business and financial data. In this study, we compare hedge accounting disclosure practices in XBRL instance documents and annual financial reports.

REVIEW OF LITERATURE

(**Gauri, 2014**) Studied **XBRL in India** with purpose of explores the role and benefits of XBRL and to find out the levels of awareness of XBRL in India. For the study, the researcher surveyed 400 chartered accountants and concluded that there is a greater level of awareness of XBRL in India but slow adoption of the new technology. And researchers also found that lack of knowledge, and irrelevant for some organizations are the main reasons for XBRL not being completely implemented in India.

(**Abhishek, 2018**) Conducted research on **XBRL and financial statements** to find the impact of XBRL reporting on the quality of financial reporting system in India For this purpose, the researcher used both primary and secondary sources of data and a one-sample t-test was applied finally, the researcher concludes that the XBRL Reporting absolutely impacts the quality of the financial reporting structure in India.

(**Dinh, 2020**) The researcher used an in-depth analysis of financial and non financial information related to hedge accounting in European banks from 2005 to 2014, and the researcher concludes that the effects of a bank's hedge accounting are financially or economically beneficial, and hedge accounting information disclosures are completely associated with market values of the firm.

(**Briggs, 2018**) Conducted a study on titled Hedge Accounting and Market Value of Quoted Manufacturing Firms in Nigeria: Panel Data. The researcher investigates the impact of hedge accounting disclosure on the market value of publicly traded oil and gas companies. According to the researcher A cash flow hedge has a favorable and strong association with market value, on the other hand. Fair value hedging and net investment hedging have a positive but insignificant relationship with the market value of listed oil and gas companies.

Using the Delphi method, (**Trinkle, 2011**) investigates the impact of XBRL on financial reports. The panel believes that XBRL will have a significant impact on firms, financial reporting, financial report users, and audits. Higher accessibility of financial reports, better regulatory compliance, increased availability of financial reports, facilitation of continuous reporting, and improved efficiency in investment and corporate decision making are the most likely effects of XBRL.

(**Almubaideen1, 2019**) Studied hedge accounting In their research paper titled, The Effect of Applying Hedge Accounting in Reducing Future Financial Risks in Jordanian Commercial Banks, they looked into the relationship between hedge accounting and future financial risk reduction. Finally, the researchers discovered that there is a well-built association between cash flow hedge and financial risk reduction, but a weak relationship between net investments in foreign operation hedge and financial hazard reduction.

Objective of the study

The study intended to attain the following objective

To study the disclosure practices of hedge accounting information under annual reports and XBRL Instance documents and to compare the difference of hedge accounting information disclosed under XBRL instance documents with information disclosed in annual reports. The study also aims to investigate the role of XBRL in preparation and presentation of financial reports.

Hypothesis

The researcher framed null and alternative hypothesis, to compare the level of hedge accounting information disclosed under XBRL instance documents and annual financial reports.

H₀; There is no significance difference in the disclosure level of hedge accounting information in annual reports report and XBRL instance documents.

H₁: Level of Hedge accounting information disclosed in XBRL instance documents is more than disclosure of annual reports.

Research methodology

The study is based on secondary data, for this study convenience sampling method is used to select sample and Infosys Technologies Limited is considered as the sample. The data for the study is collected through XBRL instance documents and annual financial reports of Infosys Technologies Limited for the year 2021. To achieve the research objective we count the number of words and number of tables disclosed related to hedge accounting under the XBRL instance documents and annual financial report of Infosys Ltd in the year 2021. Content analysis methods, other descriptive statistics and advanced statistical tools are used to analyze the data. The paired t-test was used to compare the disclosure level XBRL instance document with annual financial reports.

Theoretical Framework

Companies in the following categories must file financial reports in XBRL format, according to Section 17 of the Companies Act, 2013.

- (I) Companies and their Indian subsidiaries that are listed on Indian stock exchanges;
- (ii) Companies with a paid-up capital of at least five crore rupees;
- (iii) Businesses with a revenue of one hundred crore rupees or more;
- (iv) All businesses that must prepare financial accounts in line with the Companies (Indian Accounting Standards) Rules, 2015.

Role of XBRL in financial reporting

eXtensible Business Reporting Language (XBRL) is a universal standard for electronic communication and reporting of financial data. By using XBRL companies can provide a more reliable, accurate, and the better quality information through low cost

- 1) XBRL will digitalize the business reporting, hence it making more transparent.
- 2) Reduction of cost and human error.
- 3) Improved data accuracy and automation of work
- 4) It can be used to communicate financial and non-financial data
- 5) Multi-languages and accounting standards support

Type of Hedge Accounting

Under IFRS-9 and Ind AS 109 for hedge accounting purposes mainly there are 3 types of hedges namely, fair value hedge, cash flow hedge, and a net investment hedge

1. Fair value hedge: The risk being hedged in the fair value hedge is changed in the fair value of an asset or a liability or of an unrecognized firm commitment or a component of any such item. And the gain or loss on the hedging instrument shall be recognized in the profit or loss account (if the hedging instrument is an equity instrument then the gain or loss from hedging instruments should be recognized as other comprehensive income). And the hedging gain or loss on the hedged item shall adjust the carrying amount of the hedged item (if applicable) and be recognized in profit or loss.

2. Cash flow hedge: The risk being hedged in a cash flow hedge is exposure to variability in cash flows. Volatility in future cash flow will result from a change in the interest rate, exchange rate, and equity price or commodity price etc. cash flow hedge adjusts the exposure to volatility in cash flow of recognized assets, recognized liability, highly probable forecast transaction or a component of any such item. Change of effective portion of hedging instruments are initially in OCI and taken to a separate component of equity. The ineffective portion of the change in the fair value of the hedging instrument is recognized directly in profit or loss.

3. Net investment hedge: An entity may have overseas subsidiaries, association's joint ventures or branches. It may hedge the currency risk associated with the transaction of the net assets of these foreign operations into the group's currency

Result and Discussion

Infosys Ltd is an Indian multinational technology company that provides business consultation, information technology and outsourcing service. For the study, Infosys Ltd is considered as a sample and the Content analysis method was used to analyze the annual reports of Infosys Ltd. Data for the below table is collected through XBRL documents and annual financial reports of Infosys ltd for the year 2021. For analysis of disclosure of hedge accounting information in XBRL instance documents and annual reports, we count the number of words, number of tables, and number of pages disclosed related to hedge accounting in both reports. Under XBRL instance documents total number of wards disclosed related to hedge accounting were 850 wards, under annual reports 567 wards are disclosed. When XBRL financial statements and annual

financial reports are compared level of hedge accounting disclosure in XBRL format is more.

Table 1 Comparison between disclosure of hedge accounting information in XBRL instance documents and Annual reports.

	XBRL instance documents	Annual reports	Difference
Number of wards disclosed related to different types of hedges used	222	119	103
Number of wards disclosed related to hedging reserve	224	156	68
Number of wards disclosed related to measurement of derivatives instruments (FVOCI/FVTPL)	620	374	246
Number of wards disclosed related to hedged items and hedging instruments	253	172	81
Total	1319	821	498
Mean	329.75	205.25	124.5

Source: XBRL and annual Reports of Infosys Ltd-2021.

The total number of pages disclosed in XBRL financial reports of Infosys Ltd is 513 pages and the total number of pages disclosed in annual financial reports is 320, pages only simply by observing the number of pages disclosed in XBRL instance documents and annual financial statements we can conclude that XBRL financial reports disclosure more than the annual audited financial reports. To compare the disclosure level of hedge accounting information in XBRL and annual audited financial reports paired sample t-test was applied to the above table.

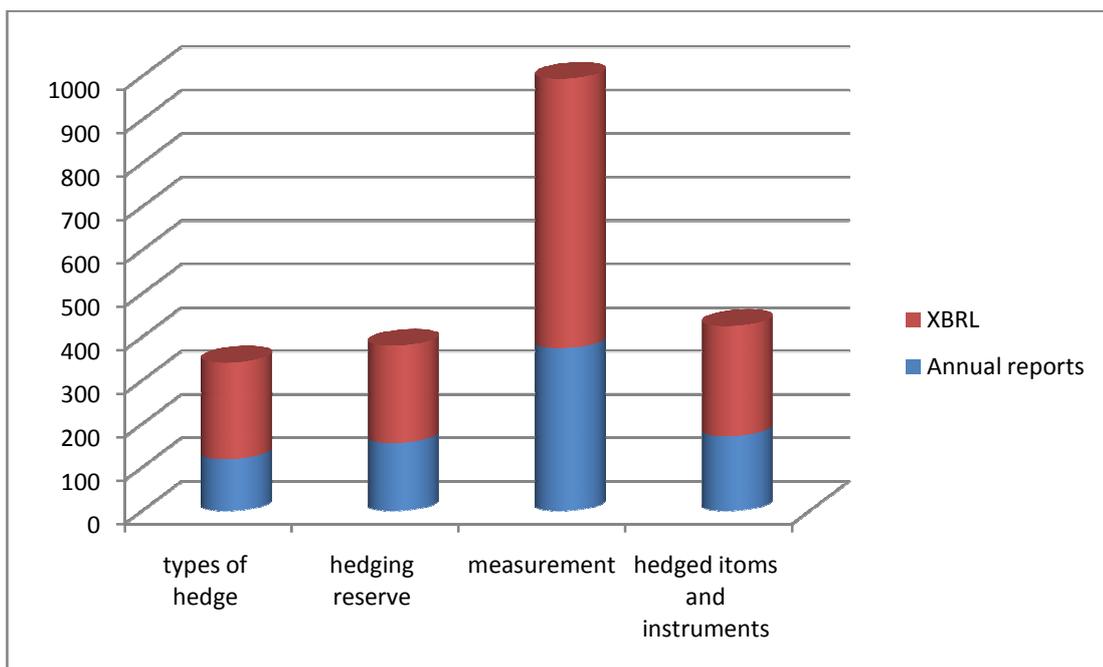


Table-2: Results of Paired sample t-test

paired Sample Test							
	Mean	Std. Deviation	Paired differences		t	df	P-value
			Mean	Standard deviation			
Pair 1 Annual report	329.75	114.668	-124.500	82.27798	-3.026	3	.056*
XBRL	205.25	194.017					

* Significance level at 5%

The paired t-test was applied to Table 1 using SPSS version 26, to know the mean difference between two sets of data i.e. disclosure of XBRL instance documents and annual financial statements. And test results show that the mean difference between the two sets is not equal to zero which means there is a difference in level disclosure of hedge accounting information under XBRL instance documents and annual reports. The paired t-test calculated f value is -3.026 and table value at 5% significance level is 0.056, f-value is more than significance value. The researcher accepts the alternative hypothesis i.e. the disclosure level in XBRL instance document is more than in annual reports.

Findings

The study findings reveal that the disclosure level of hedge accounting information under XBRL instance documents is more than the disclosure under annual reports, and XBRL instance documents also give more detailed information related to hedged items, hedged instruments and recognition, and measurements of derivative financial instruments but annual reports contain only a few words. The accuracy of the financial statement is also high in XBRL instance documents, because XBRL is XML technology based and electronically prepared with no human errors. The study also found that in India filing of XBRL document is not mandatory for all firms, it is mandatory for a certain class of companies only.

Conclusion

Many countries recognize the need of publication of annual report in XBRL format, and made mandatory of filing financial reports under XBRL. XBRL financial reports disclose more information to various stake holders and also it reduces the overall cost of preparation and presentation of financial reports. Investors can take rational decision by analyzing XBRL financial statements. With complete adoption of XBRL firms can automate data collection and by presenting its statements in XBRL a firm can benefit investors and other stakeholders and enhance its profile.

Limitation and Scope for the Further Study

This paper is mainly concentrate on compare the level of disclosure of hedge accounting in XBRL and non XBRL financial reports and it is not applicable to disclosure of full annual reports, it is only limited to disclosure of hedge accounting. For the study only one company (Infosys) is considered as sample and results can't be generalized to all other companies' disclosure level.

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