

## A Study on Disclosure of Fair Value Hierarchy Information in the Annual Reports And in the XBRL Instance Document

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### Abstract

In the accounting field, fair value accounting is not a first-hand thought. Fair value principles have been practiced for the last few decades. Companies were using these practices in the form of current value. Ind AS 113 introduce a fair value hierarchy techniques to rise standardization and comparability of disclosure of fair value. This hierarchy techniques is classified into three different input levels (level-1, level-2, and level-3). The Level 1 inputs are considered as Unadjusted quoted prices in active markets for identical assets and liabilities. And level 2 inputs are inputs other than quoted prices within Level 1 that are observable for the asset and liability, either directly or indirectly and Level 3 inputs are unobservable inputs for the assets and liability. Today this fair value measurement techniques is disclosed through XBRL. The study is based on secondary sources of data. Content analysis method used for this study. Paired sample t-test was used to compare the difference in qualitative and quantitative measures of disclosure in both annual report and XBRL instance document. The study underwrites to the literature on fair value hierarchy practices and the importance of XBRL in a company's financial statement disclosure. It also concludes that significant differences between traditional annual report disclosure and XBRL instance document.

**KEYWORDS:** Fair value, XBRL, Hierarchy, Instance document, IFRS 13.

### Introduction

In the globalized world, most companies become digitized and adopt modernized techniques to transact business activities easier and more durable way in such technical adoption XBRL is one of them to present the financial information to transact with users of the company globally. And the universal language of business accounting is held through IFRS and accurate implications are possible through XBRL. In that IFRS one of the most measuring technique is Fair value dimensions. IFRS 13 defines fair value, crowds out asolitary background for determining fair value, and necessitates disclosures about fair value measurement (ifrs.org 2022). Fair Value Hierarchy is the important impression in Ind AS 113, that are categorized into three levels (Level 1, Level 2, and Level 3). The scope and environment of disclosure necessities are based on the Level at which the inputs are classified. The concept has been earlier mentioned under IFRS 7, Financial Instruments: Disclosures. However, IFRS 13 strained desires to non-financial instruments. The ambition is to dissect how necessities to disclose hierarchy levels for both financial and non-financial instruments. XBRL is extensible and flexible it can be reformed to a extensivediversity of different requirements, is designed for accounts and financial statements, as well as fixed templates, and, generates digital, unambiguous, reusable,

and accurate versions of financial statements, it also sets the customary mode of record, storage, and communicating business financial information, and its use all over the world, in different languages.

The goalmouth of fair value measurement is to determine the cost at a potential investor could trade assets or/and transmit a accountability in an arranged operation under the existing economic situation at the reporting time. For a non-financial asset, a fair value measurement needs to be clear to regulate the actual asset or liability that is the focus of the measurement, the effective evaluation assumptions for the measurement, the primary market for the instruments, and the investment assessment methodology for the measurement. XBRL permits the formation, magazine, and interchange of complete financial statements and it provides dissimilar levels of elasticity depending on the company's desires and definite situations. Nowadays all companies used XBRL to protect outlays and expand productivity in holding corporate and economic data. Hence the present study aims to analyze the fair value hierarchy disclosure system followed by Indian companies, as required by IFRS 13. Further, the study intends to compare the disclosure of the fair value hierarchy system between traditional annual report disclosure with XBRL instance document.

### Literature review

An institution can activate XBRL recording after it has the required taxonomy. Organizations can then use and share information from the analyses more readily both within and between enterprises. The high level of generality and identity quality of the labels can be used by XBRL-aware programs to automatically process the data for tracking and analysis. Any physical infrastructure, computer file system, scripting languages, or accounting standard is unaffected by XBRL. (Fortin, 2019). The study outlines the nature of securities apprehended in every fair value level subsidises to the value consequencetakenover the Fair value levels. This study clearly shows a modification in value relevance between investments within the same Fair value level. Conceptual descriptions can be written in as numerous vernaculars as required using XBRL. Third parties can furthermore contribute vocabulary interpretations. This means that a variety of statistics can be displayed in languages other than the one in which they were created without any special effort. Because it can automatically open reports to diverse communities, the XBRL organization makes great use of this functionality. (Landsman\*, 2007) the researcher investigates the relationship between the Level 2 and level 3 Fair value inputs. These levels comprise further measurement inaccuracies and tolerate executives to practice their incomes administration carry out compared to level 1 inputs. And finds that level 1 fair value inputs have more reliability and relevance in financial reporting. In greater percentage of Level 2 and level 3 inputs in financial reporting leads to increase earnings volatility.

XBRL enables the establishment of taxonomies, which are repeatable, definitive descriptions that preserve the content of all of the reporting terms used in a business report, as well as the connections between them. Authorities, accounting standards makers, regulatory agencies, and other organizations create taxonomies to clearly describe material that must be disclosed. XBRL is a vocabulary that may be used and extended as needed, with no restrictions on the types of data that can be described. (Valentinetti, D., & Rea, M. A. 2012) explains the Instance document play a major role in digital financial reporting measurement. In digital financial reporting XBRL play a major role and gave distinctive set of online-readable codes to permit

the transaction of cooperative data. Study aims to verify the difference of IFRS Taxonomy procedure with financial reporting practises of registered corporations. The study concludes based on the division and dimension of the establishments have difference in XBRL disclosure with financial statements.

The data in XBRL reports is transferable between various information services in various enterprises. This permits the distribution of corporate statistics throughout a reporting cable. XBRL is used by those who need to submit reports, share knowledge, broadcast assessment results, and tolerate direct figures acquisition. (Kasyan A., 2018) banks functioning in Portugal in their disclosure of financial assets and liabilities use hierarchy level- 2 of measurement technique which minimizes the degree of reliability about their values. But the researcher tried to convey the reality to compare with developed countries like the USA banking sector and Poland banking sector might be measured financial assets and liabilities based on level-1 data. So, the researcher suggested the Portuguese banking sector improve the fair value measurement techniques. (Landsman W. R. 2007) These levels encompass further measurement mistakes and sanctions supervisors to practise their retributions management performance compared to level 1 inputs. The study is based on descriptive method and the researcher use qualitative factors to study the earnings persistence of fair value hierarchy. This study finds that level 1 fair value inputs have more reliability and relevance in financial reporting. In greater fraction of Level 2 and level 3 inputs in financial reporting leads to increase earnings volatility.

XBRL allows the labelling of activities, which may then be combined into XBRL reports, in parallel to the interchange of comprehensive financial records such as financial statements and risk and performance reports. These operational capabilities enable the system-agnostic sharing and analysis of large amounts of supporting data, and they could be the key to changing reporting distribution networks. (Ochi N. 2017) the conceptual data is presented with the use of different tables and graphical distributions for better understanding related to reliability, objectivity, and faithfulness of fair value measurement concerning fair value hierarchy. And result shown that the lower the level of fair values it always results the lower the level of relevance. (Bovee, M. 2005) XBRL is an online mode of reporting business accounting information, it helps to transact, accumulate, and analysis of entities' information using a unified tagging model. It assists in standardized, comparability, and re-usability of the data with the help of different accounting principles.

### Objective of the study

- To analyze the requirement of fair value hierarchy disclosure under Ind AS 113.
- To compare the disclosure of the fair value hierarchy information in the annual reports of the company and in the instance document.

### Hypothesis

**H<sub>0</sub>:** There is no difference in the disclosure of fair value hierarchy information in the annual report and in the instance document.

**H<sub>1</sub>:** There is a difference in the disclosure of fair value hierarchy information in the annual report and in the instance document.

## Methodology

### a) Population

Population for the study includes BSE- 30 companies listed in Bombay Stock Exchange.

### b) Sample

The population is divided into different strata-basis on the industries type. The IT industry has been chosen for the study, which includes Infosys, Tata Consultancy Service, Wipro, Tech Mahindra, and HCL Technologies. Among these five companies, Infosys Technologies Private Limited has been chosen as sample for the present research, by using convenience sampling method. Based on prior studies Infosys has disclosed a fair value hierarchy information in a detailed manner.

### c) Content Analysis Method

The study is based on the content analysis method. The data/ information disclosed in the annual report of the sample companies is the basis for the study.

### d) Data Collection & Analysis

The secondary data was used for this study, the study is n to compare the traditional annual report of the fair value hierarchy disclosure with the XBRL Instance document of the fair value hierarchy disclosure. The data was collected from the annual report of Infosys companies in two forms i.e., traditional and XBRL financial statements. The data were analysed through descriptive statistics and hypotheses were tested using paired sample t-test.

## Fair value hierarchy disclosure system

Through soliciting data from several inputs to measure the Fair value, the standard has set three levels of hierarchy by classifying the inputs based on their relevance and reliability in the measurement. As mentioned already, it is expected that the First and most pursued input would be the Quoted Price in the Active Market followed by Observable inputs based on the accounting standard of IFRS 13 and Ind-As 113. The fair value hierarchy is divided into 3 levels based on the input data i.e., level -1, 2, 3. And also, the Panel decided to eliminate the requirements that transitions between Levels 1 and 2 of the fair value hierarchy be disclosed in terms of quantities and justifications. The theories in the Principles Declaration imply that the Panel should take into account whether disclosure of measurement errors should be offered; nevertheless, the only cause for transmission from Level 1 to Level 2 or vice versa is an alteration in the accessibility of market rates, which is integrated inside the fair value hierarchy's definitions of Level 1 and Level 2.

### Hierarchy level -1

The level -1 hierarchy is involved inputs built on the quoted price in the dynamic markets. To consider the fair value of this level, some conditions must be fulfilled such as identical assets and liabilities that are regularly transacted in an active market and the significant observable inputs; if inputs are not fulfilled the above conditions the measurement is classified as the lower level of hierarchy. Even if the market's ordinary volume of dealing is inadequate to accumulate the volume detained, the fair value of the financial instrument is evaluated within Level 1 as the merchandise of the quoted price for the independent asset or liability and the amount alleged by the

organization, even if locating order information to retail the placement in a financial exchange might influence the capacity held.

### **Hierarchy level -2**

It is grounded on inputs having no active markets and matching assets and liabilities. And it considers the quoted price with some observable inputs like rate of interest, growth rate, exchange rates, and other observable inputs commonly found in the public domain. Level-2 hierarchy is considered as a second position for measuring fair value and these inputs are not only included in observable inputs and also have some adjustments to inputs and then classified as level 2 hierarchy. They're almost certainly quoted assets or liabilities for common characteristics in active markets, or they're reversed up by marketplace information. Lending charges, credit ranges, and return curves, for example. Level 2 inputs may require modifications, and if these improvements are sufficient, the fair value would need to be categorized as level 3.

### **Hierarchy level -3**

Hierarchy level-3 is categorized as a lower level of hierarchy and its inputs are commonly not available in the public domain. So, we convert raw data into required inputs with the help of the valuation method. Most of the time existing value, some assumptions, and relevant evidence is classified as level 3 inputs. When recognized qualifications inputs are unobtainable, unobservable inputs are exploited to estimate fair value, providing for occurrences where around is petite, if any, market movement for the asset or liability at the time of the transaction. Unobservable inputs are formed through an institution using the greatest facts resources in the situations, which may contain the institution's internal statistics, and bearing in mind all readily accessible details regarding market component assumptions. The company itself uses its historic information to frame its input. Examples of the level 3 inputs are currency swaps, market predictions, financial estimates, etc. Hierarchy level of fair value comprises three levels, which are represent in the under table.

**Table 1: Fair value Hierarchy levels based on relevance**

Hierarchy levels	Inputs	Examples
Level-1	Quoted values in active markets for corresponding assets and liabilities.	Investment in equity shares of a publicly-traded corporation on the Bombay Stock Exchange (BSE)
Level-2	Observable inputs  Inputs include:  1. Quoted prices for parallel assets and liabilities in an actively traded market  2. Considered quoted prices for comparable assets and liabilities that are traded in an inactive market.  3. Supplementary quoted prices which are recognizable for the	Investment in the certificate of deposits and commercial papers, which are not operated in an active market. Fair value is measured created on the corresponding bonds transacted on the National Stock Exchange. (NSE)

	assets and liabilities.	
Level-3	Face lack of information related to the market. Fair value is measured established on unobservable inputs that are shows the predictions made by the market analyst. And adopt different valuations techniques	Investment in plants and equipment where there is less market information. Fair value is determined by adopting the current prices techniques.

Hierarchy of fair value generally implies the relevance of fair value as given in above table level-1 hierarchy has more reliability and is based on market data and no adjustment involved. Whereas level-2 has the second position because it uses observable inputs with some adjustments. The level 3 hierarchy poses a more difficulty to fair value because there is no active market, no similar assets and liabilities, and no published prices. Hence the inputs are used based on non-observable assumptions and valuation techniques for finding fair value so, it categorizes as a lower level of hierarchy.

And the researcher finds the results as level-1 has more reliability than other two levels, however, as per the analysis of different annual reports of Indian Companies the researcher found that most of the companies still use lower levels of hierarchy which are level-2 and level -3.

### Instance document (XBRL)

In a digital financial reporting world, the word XBRL offers a set of computer-readable information that empower the interchange of information and interactions. XBRL is used worldwide, although with varying implementation schemes. XBRL International, a global non-profit organization partnership, manages the open international standard for digital business reporting. We are dedicated to advancing public-interest reporting. XBRL is utilized in over 50 countries throughout the world. Every year, millions of XBRL records are produced, displacing older, paper-based reports with more usable, effective, and accurate electronic files. In a nutshell, XBRL is a language that may be used to legitimately define reporting words. These phrases can then be used to represent the contents of financial statements or other adherence, effectiveness, and company reports in a distinctive manner. XBRL allows reporting data to travel quickly, precisely, and electronically between organizations.

The conversion from paper, PDF, and HTML presentations to XBRL presentations is similar to the shift from analogue to cardinal photographs or from paper maps to digital maps. Because the material is well distinct, framework, verifiable, and digital, the fresh arrangement sanctions you to accomplish the whole thing that was earlier conceivable while also opening up an array of innovative options. Online business documents in XBRL format, like mapping software, make it easier for anyone to consume, share, evaluate, and add value to information. Transacting information of companies' financial statements through the internet and electronic media has a wide range of scope. And the present era demands more updates on annual reports, every transaction, and interpretations of financial information. Companies' stakeholders observe annual reports but the data presented in the financial statements are limited before introducing XBRL, but when XBRL came to enforce the stakeholders got

more accurate and detailed information on fair value hierarchy than traditional forms of annual reports. And also, XBRL Taxonomy helps the stakeholders to make appropriate decisions relating to companies' financial activities. And to understand local accounting as well as other accounting laws, some national jurisdictions may require their respective reporting taxonomy. Many distinct institutions, such as authorities, certain industries, or even businesses, may necessitate taxonomies or taxonomy modifications to meet their unique business reporting requirements.

## Result and discussion

**Table 2 – comparison of fair value hierarchy information between instance document**

**( XBRL ) and Annual report**

SL NO	PARTICULARS	INSTANC E DOCCU MENT(X BRL)	ANNUAL REPORT	DIFFEERENC E	Percentage of changes (%)
1	Number of pages Disclosed under fair value hierarchy	23	2	21	92
2	Number of tables Disclosed under fair value hierarchy	22	2	20	91.6
3	Number of words Disclosed under fair value hierarchy	4629	291	4338	93.7

(Source: Data retrieved from annual report of Infosys ltd-2020-21)

the above table exhibits fair value hierarchy information relating to using several words in annual reports and instance documents. The descriptive study shows information disclosed in XBRL is higher compared to the Annual report. statistical tools used for testing the result of the above table the researcher has used fair value hierarchy information in the form of total words disclosed. And that hierarchy is divided into three types based on inputs used i.e., level-1, level-2, and level-3, and their comparative analysis has been discussed in the below section under the table.

**Table 3 – comparative analysis of words disclosed under different hierarchy levels**

Numerof words disclosed under	INSTANCE DOCCUMENT(XBRL)	ANNUAL REPORT	DIFFEERENCE	Percentage of changes (%)
Level-1	1150	103	1047	91.77
Level-2	1801	85	1716	95.00
Level-3	1678	90	1588	94.90

Table 3 depicts the comparison between disclosure of fair value hierarchy disclosure in the traditional annual report with instance document (XBRL) relating to the number of words, XBRL enables accountants to utilize the software to tag all the financial items in their financial reports. And which provides instance documents electronically and helps to exchange and endorse information between computers. The above table clearly shows disclosure of data in XBRL is comparatively higher in the Annual Report of the company in the form of the number of words.

Infosys company has disclosed information relating to fair value hierarchy in an instance document is about 93% of disclosed information is found when compares to the annual financial report information in the form of words used which is more useful because when the information is presented in a table form is more authentic than the traditional form of presentation.

Table:4 –paired sample test to know fair value hierarchy disclosure between XBRL instance document and Annual report.

**Result of Paired Samples t- Test (No. of words)**

	Mean	Std. Deviation	Paired Differences		t value	df	P value
			Mean	Std. Deviation			
Annual Report	92.66	9.29157	-1450.3	355.111	-7.074	2	.019
XBRL	1543.00	345.859	3333	72			

The above table represents the STATISTICAL results of fair value hierarchy disclosure between instance documents (XBRL) and the annual report. The sample data consists of words consisting in the fair value hierarchy information disclosed in both instance documents and annual reports that are increased level those are presented in table 4, and to more extent, it is applied to paired sample t-test in IBM SPSS stats 26v. The results show paired sample t-test rejects the null hypothesis and accepts the alternative hypothesis. The P-value of .019 is less than the alpha value of 0.05 (0.019<0.05) hence; the null hypothesis is rejected. This states the amount of information disclosed in XBRL is more than information disclosed in the annual financial report of Infosys company fair value hierarchy disclosure in 2020-2021.

**Conclusion**

XBRL is a virtualized financial reporting so all the entities strain to adopt XBRL instance document for disclosure of financial information than the traditional reporting method because it transacts between entities and financial reporting information. It will help investors to choose better investment alternative and also provides decision-making freedom. Fair value always discloses information in market

value, it has a higher chance of regular updating of financial measurement thus traditional reporting method has some limitation to update all the transaction hence XBRL replace all the limitations in the digital world XBRL occupies a prominent role in financial reporting.

The fair value hierarchy holds a noticeable role in Ind AS 113, based on , the hierarchy is classified into three levels such as level-1, level-2, and level-3. Among them, the level-1 hierarchy has more reliability based on research studies. Infosys Ltd has followed both the annual financial reporting and XBRL, however, presented more of a fair value hierarchy in XBRL. And also, it exhibits comparatively more understanding and reliability than a traditional form of the annual reporting system in words, tables, and pages. To of researcher's knowledge, the accurate result can be drawn by comparing hierarchy levels of fair value with different companies that are following the fair value hierarchy. Hence researcher suggesting to compare each company's fair value hierarchy disclosure with the XBRL instance documents would results more contribution for a further research study.

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