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Do Oil and Gas Companies Comply with Requirements of IFRS 6?: Evidence from India and Global Companies

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Abstract

This study examines whether oil and gas companies comply with the requirements of the International Financial Reporting Standards (IFRS) 6 on Exploration and Evaluation (E&E) of Mineral Resources. For this purpose, a comprehensive checklist divided into eight different parameters was prepared by including every requirement of IFRS 6. While building on the previous studies, the annual reports of the top five Indian and top five Global companies engaged in this business have been investigated in detail against the checklist using content analysis as the research method. Results show that a majority of the companies (both Indian as well as global companies) have not been complying with the requirements of IFRS 6. In five out of eight parameters the companies have not complied with even half of the requirements. The overall compliance ratio is as low as 41.54 percent and 43.68 percent for Indian and Global companies respectively. While analyzing the non-compliance, it has been observed that despite having distinct accounting standards, different kinds of companies are reporting differently. Thus, it is not in line or consistent with the goal of IFRS i.e., to establish a universal language for the companies to prepare the accounting statements. The research findings identify the exact area of non-compliance while citing the relevant paragraph number of IFRS 6.

Keywords: Compliance, Financial Reporting, IFRS, Extractive Companies

JEL Classification Code: G15, M41, M48

1. Introduction

The amalgamation of global markets has led to establishing accounting rules to make it easier for the stakeholders to interpret the financial statements, irrespective of the business location. To facilitate this comparison, International Financial Reporting Standards (IFRSs) have been issued to establish a universal language for the companies to prepare the accounting statements. The International Accounting Standards Board (IASB) is an independent, private-sector body that develops and approves IFRSs. Since it's a popular notion that countries that have converged with IFRS attract more and more foreign investors (Tran et al., 2020), IFRSs are required in more than 140 jurisdictions and permitted in many parts of the world.

However, Cascino and Gassen (2015) who had investigated the effects of mandatory IFRS adoption on the comparability of financial accounting information, found that the overall comparability effect of mandatory IFRS adoption is marginal. Jung et al. (2020) examined whether the adoption of IFRS has increased financial statement comparability among firms and reduced the undervaluation of Korean firms in the capital market by enhancing financial statement comparability. The analysis of changes in domestic firms' comparability showed that their comparability improved following IFRS adoption. Meanwhile, the examination of cross-national differences in comparability demonstrated that, although there has been no significant change in comparability with firms in the U.S. and the EU across Korean industry since IFRS adoption, comparability with China has decreased while that with Japan improved.

Nguyen et al. (2020) stated that although the Ministry of Finance issued a roadmap to apply IFRS in Vietnam for

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foreign-invested enterprises, listed enterprises, and state-owned enterprises to converge and match those of businesses around the world, except for foreign-invested enterprises that fully agree with this roadmap, most of the remaining enterprises are e not ready to adhere to this transition. Various firms exploit the discretionary nature of IFRS to meet target earnings. Studies on IFRS adjustments analyzed their value relevance or the association between the adjustments and earning management at the time of IFRS adoption Ha and Kang (2019) estimated intentionally adjusted parts among IFRS adjustments and analyzed the association between intentional adjustments and meeting of target earnings. Firms intentionally over-adjusting the total assets at the first-time adoption of IFRS were predicted to more likely meet target earnings by abusing the discretionary accounting standards of IFRS, even after IFRS adoption.

Due to all these studies, it is obvious to doubt that whether the claim of companies to be IFRS compliant stands true or not. Glaum et al. (2013) stated that compliance levels are determined jointly by the company- and country-level variables, indicating that accounting traditions and other country-specific factors continue to play a role despite the use of common reporting standards under IFRS. As observed by Fekete et al. (2008) that it is not possible to check every IFRS and some ceteris paribus is needed, therefore, the scope of this paper has been restricted to checking requirements of IFRS 6.

2. Literature Review

Several research studies have attempted to check compliance with IFRS in different countries like Tower et al. (1999) in Australia, Joshi and Al-Mudhahki (2001) in Bahrain, Street and Gray (2001) in Switzerland, Dahawy et al. (2002) in Egypt, Glaum and Street (2003) in Germany, Fekete et al. (2008) in Hungry, and Hodgdon et al. (2008) in cross country. Almost all of them have pointed out varying degrees of compliance levels like 62%, 68%, 72.6%, 83.7%, etc. In these studies, the researchers have focused on those IFRS that are general in nature and applicable to all the companies like International Accounting Standards (IASs) and other disclosures. In doing so they missed the key limitation of IFRS i.e., it lacks industry guidance (PwC, 2011). Even the Securities Exchange Commission (SEC), USA has highlighted this major flaw and specially stated the case of the Extractive Industry while pointing out this drawback (Erchinger, 2012). Therefore, in this research paper, the focus has been on Extractive Industry. Further, the research has been confined to IFRS 6 because it is part of those IFRSs that apply to specific industries only and thus despite being important has been unexplored. There are only two research studies that have attempted to assess the level of compliance in this area.

Accounting for extractive industries has historically been practiced by one a number of methods: successful efforts, full costing, area of interest, appropriation, and reserve recognition accounting. The choice of the method adopted leads to different accounting figures. The difference in the treatment of the costs leads to different accounting figures being reported in the financial statements of extractive companies. This means that stakeholders find comparisons for decision-making purposes difficult. These difficulties have culminated in the release of IFRS 6 Exploration for and Evaluation (E&E) of Mineral Resources, to help harmonize accounting practice.

Karapinar et al. (2012) investigated the influence of accounting standards on financial reporting for companies in the extractive industry. In Turkey, listed firms prepare their financial reports according to the International Accounting Standards and the International Financial Reporting Standards (IAS/IFRS) since 2005. This study aimed to determine the degree of compliance with IFRS 6, comparing global and Turkish extractive entities. They found that the entities reporting in accordance with IFRS 6 in Turkey are more likely to fail to declare their accounting policies, whereas global companies are more likely to be compliant with IFRS 6. Despite having such a great model, the major limitation of this study is that it has not solely focused on checking the level of compliance with IFRS 6 rather than at many points this study goes beyond the scope of IFRS 6.

This limitation has been noticed by Abdo (2016) and he has made a remarkable attempt to counter it by confining the research to the measurement, presentation, impairment, and disclosure of E&E assets strictly as per IFRS 6. Through content analysis of annual reports of 122 upstream oil and gas companies from around the world, he investigated the role of IFRS 6 in harmonizing extractive industries' accounting practices. His analysis identified seven types of companies, which differed in their compliance with IFRS 6. Hence, he concluded that IFRS 6 has had some success in harmonizing accounting treatments of E&E expenses but that this success is limited and more needs to be done to achieve wider harmonization for the extractive industries. In fact, under the conclusion section, Abdo (2016) himself has recommended to carry out a more meticulous investigation to make higher quality conclusive assertions about extractive companies post IFRS 6 with finer vigorous results.

3. Methodology

Al-Shammari et al. (2008) stated that investigating financial statements is always a better methodology than a questionnaire while assessing the level of compliance with IFRS. Further, both Karapinar et al. (2012) and Abdo (2016) had drawn their respective conclusions based on financial statements; thus, data was collected through published

financial statements contained in the annual report of the sample companies.

Gray et al. (2019) in their research on financial reporting in the extractive industry have mentioned that most of the studies related to the extractive industry have been done in Australia, UK, and the USA whereas developing nations such as India, Brazil, and China have been ignored. Hence, they had recommended to carry out studies in these countries as well. Hence special emphasis has been given to Indian oil and gas companies in this study. The model by Karapinar et al. (2012) is a better model to check compliance as well as harmonization compared to other models; therefore, it has been chosen for this study and thus Indian companies are compared with the top five Global companies.

Sharma (2014) had referred to the top five upstream oil and gas companies in India. All these companies are listed in the Indian stock market and thus prepare their financial statements as per converged IFRS. Further, out of these five companies, four are also included in the Nifty 50 that comprises the top 50 companies in India in terms of market capitalization. Karapinar et al. (2012) had sampled those upstream oil and gas companies that prepare their financial statements as per IFRS. All these companies are also included in the Fortune 500 list and out of five, four companies are included in the top 100. Further, these five companies belong to five different nations, hence they provide a world view. Due to all these reasons, the same companies are chosen for comparison with Indian companies. The names of these sample companies are as under:

Indian Oil Corporation Limited (IOCL)	Royal Dutch Shell, Netherlands
Oil India Limited (Oil India)	BP plc, United Kingdom
Oil and Natural Gas Limited (ONGC)	Eni SpA, Italy
Reliance Industries Limited (RIL), India	PJSC Gazprom, Russia
Vedanta Limited, India	Total S.A., France

During the preparation of the checklist, it was observed that the nature of some of the items is such that it might not occur every year, therefore, three annual reports have been inspected in place of one annual report.

The accounting period for Indian companies commences in April and ends in March; thus, the Financial Year 2017 (FY'17) denotes a period from April 2016 till March 2017. The FY'17 is also the year when Indian companies converged with IFRS for the first time. Annual Reports of three years since then have been included in the sample i.e., FY'17, FY'18, and FY'19. Similarly, FY'16, FY'17, and FY'18 are chosen for Global companies as their accounting period replicates the calendar year.

A comprehensive checklist has been prepared to include every requirement of IFRS 6 and it has been grouped into eight major parameters. Thereafter, published financial statements and notes to accounts of the sample companies are investigated to find whether companies comply with the requirements or not. To perform this action Content Analysis has been chosen as the research method including annual reports as specified by Bryman and Bell (2007). Content analysis is a research tool used to determine the presence of certain words, themes, or concepts within some given qualitative data. Using content analysis, researchers can quantify and analyze the presence, meanings, and relationships of such certain words, themes, or concepts (Abdo, 2016; Holsti, 1969). Further, this analysis includes both qualitative as well as quantitative techniques (Philipp, 2000) and it can take shape of thematic analysis or relational analysis.'

Though the same research method as of Abdo (2016) is being used, the checklist prepared in this research is much more comprehensive including every aspect of IFRS 6 as compared to the four-point checklist prepared by Abdo (2016), and also the sample companies are quite different from his study.

4. Results and Discussion

4.1. Bifurcating Amount of E&E Asset into Tangible Asset and Intangible Asset

An entity shall classify exploration and evaluation assets as tangible or intangible according to the nature of the assets acquired and apply the classification consistently. Some exploration and evaluation assets are treated as intangible (eg drilling rights), whereas others are tangible (eg vehicles and drilling rigs). To the extent that a tangible asset is consumed in developing an intangible asset, the amount reflecting that consumption is part of the cost of the intangible asset. However, using a tangible asset to develop an intangible asset does not change a tangible asset into an intangible asset (Paragraphs 15 and 16 of IFRS 6).

Table 1 portrays the level of compliance by Indian and Global companies in this regard. Significant differences have been observed since only four companies are classifying E&E assets as tangible or intangible assets according to the nature of the assets. Out of these four, ENI SpA Italy and Total SA France are classifying only the expenditure related to mineral rights as intangible assets whereas all other E&E expenditures are classified as tangible assets. However, when a tangible asset is consumed in developing an intangible asset, the amount reflecting that consumption is part of the cost of the intangible asset., for example, allocated depreciation. However, Oil India Limited classifies the entire amount of E&E assets as intangible assets and only the amount of land is classified as CWIP (Capital Work in Progress,) hence this company is not classifying assets like

Table 1: Bifurcation of E&E Asset into Tangible and Intangible

IOCL	Oil India	ONGC	RIL	Vedanta
Complied [1a] E&E asset shown as 1. Intangible Asset under Development 2. Capital Work in Progress (referred to as CWIP) 3. Other Assets	Complied E&E assets except land shown as an intangible asset under development. Land has been disclosed under CWIP.	Not Complied [2b] As 'Exploratory Wells in Progress' under 'Intangible Asset Under Development'.	Not Complied[b] Amount of E&E asset shown under 'Intangible asset under development' along with amounts of other assets.	Not Complied[b] As 'Exploration Intangible Asset Under Development'.
Shell	**BP**	**ENI**	**Gazprom**	**Total Co.**
Not Complied[3c] As 'Exploration and Evaluation' under 'Property Plant and Equipment' (referred to as PPE).	Not Complied[c] As 'Exploration and Appraisal Expenditure' in the schedule of Intangible Asset.	Complied 1. 'Exploration rights' under intangible assets. 2. All other E&E costs as 'E&P exploration assets and appraisal' under PPE (as part of tangible assets).	Not Complied[c] E&E asset shown under PPE.	Complied 1. 'Unproved Mineral Interest' in Intangible asset 2. 'Unproved Properties' in Exploration and Production Properties.

[a]Though IOCL has stated that all E&E expenditure are capitalised as part of intangible assets, yet it has provided a note 34 in its financial statements disclosing three kinds of assets (as mentioned above) generated as a result of E&E expenditure.
[b] ONGC, RIL and Vedanta have disclosed E&E asset as intangible asset only.
[c] Shell and Gazprom have disclosed entire E&E asset as Tangible asset only whereas BP has disclosed entire E&E asset as Intangible asset only.

vehicles and drilling rigs as part of tangible asset. Given the above, it emerges that even the companies that classify the amount of E&E assets as tangible or intangible assets are not doing it strictly as required under paragraph 16.

Karapinar et al. (2012) had not checked the above requirement whereas Abdo (2016) had mentioned that 89 percent of companies comply with presentation requirements of E&E assets by bifurcating them into tangible and non-intangible assets. With all due respect, the findings of Abdo (2016) have been disapproved as it is clearly evident that majority of the companies are not complying with the presentation requirements as laid down under IFRS 6.

4.2. Reclassification of E&E Asset

Paragraph 5 (b) of IFRS 6 unambiguously states that this IFRS an entity shall not apply the IFRS to expenditures incurred after the technical feasibility and commercial viability of extracting a mineral resource is demonstrable. Further paragraph 10 states that expenditures related to the development of mineral resources shall not be recognized as exploration and evaluation assets. Table 2 depicts the different criteria adopted for reclassification of E&E assets. It has been observed that all Indian companies except Vedanta have disclosed in their accounting policies that reclassification happens only after the commencement of production; it is a clear-cut violation of paragraph 5(b) and 10 of IFRS 6.

Among global companies, Gazprom has not provided the accounting policy regarding reclassification and other companies reclassify upon the establishment of proved reserves. The definition of proved reserves is not provided under IFRS 6, however, ICAI (2016) in its Guidance Note on accounting for the oil and gas industry defines proved oil and gas reserves as "those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations before the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether the estimate is a deterministic estimate or probabilistic estimate. The project to extract the hydrocarbons must have commenced or the enterprise must be reasonably certain that it will commence the project within a reasonable time. Proved oil and gas reserves can be classified as 'Proved developed oil and gas reserves' and 'Proved undeveloped oil and gas reserves'" (ICAI, 2016).

The sample companies have not mentioned whether the reclassification has been done after developed reserves of undeveloped reserves. Thus, it cannot be said clearly if global companies are complying or not with the aforementioned requirements though it appears that they are not complying. Usage of the terminology as provided under IFRS is necessary for uniformity in financial statements and global companies are not complying with the same, hence improvement in this space is highly solicited.

Karapinar et al. (2012) had ignored this requirement, as well as Abdo (2016) had claimed that he has strong evidence

Table 2: Reclassification of E&E Asset

IOCL	Oil India	ONGC	RIL	Vedanta
Not Complied If the project is feasible, then E&E assets shall be continued to be disclosed as 'Intangible Assets under Development'.	Not Complied E&E assets are either transferred to PPE as Oil and Gas Asset (referred to as O&G asset) or written off.	Not Complied If the well is set to begin the production, then E&E assets are transferred to O&G Assets else E&E assets are written off.	Not Complied Till such time a well is set to begin the production, the costs are aggregated in 'Intangible Assets under Development' and disclosed as Intangible Assets.[4a]	Complied If viable reserves are recognized, and technical feasibility is verified, then E&E cost is moved to PPE-development/ producing asset.
Shell	**BP**	**ENI**	**Gazprom**	**Total Co.**
Ambiguity Exploration costs capitalized are written off unless proved reserves are booked.	Ambiguity Post establishment of proved reserves and approval of the development, the expenditure is transferred to 'Oil and Gas Properties' under PPE.	Ambiguity Post discovery of proved reserves, the amount of unproved exploration rights is reclassified to 'proved exploration rights', Similar treatment was done for the tangible portion as well.	Not complied Accounting policy not disclosed.	Ambiguity Costs of exploratory wells which result in proved reserves are capitalized.

[a] Further RIL has also stated that 'Intangible Assets under Development' includes both exploratory costs and development costs (for proved reserves).

that oil and gas companies comply with the reclassification requirements. With all due respect, the findings of Abdo (2016) have been disapproved as it is evident that in the case of global companies no clear-cut conclusion can be drawn, and in the case of India companies, only one company is complying with this requirement.

4.3. Impairment of E&E Asset

IFRS 6 has given special emphasis on Impairment of E&E Asset by providing the following detailed list of indicators under paragraph 20, the occurrence of any of these signals for impairment testing.

i. The period for which the entity has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed.
ii. Substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned.
iii. exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the entity has decided to discontinue such activities in the specific area.
iv. Sufficient data exist to indicate that, although development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

Table 3 portrays the level of compliance regarding the impairment of E&E assets. Oil India has merely mentioned that it assesses E&E assets as per converged IFRS 6; these kinds of abstract disclosures do not serve any purpose, therefore, even Oil India does not significantly differ from RIL and Gazprom that have not disclosed their accounting policy regarding impairment. Talking about the companies that have made disclosures regarding impairment policy, except Vedanta, they do not include all the points of paragraph 20. Moreover, only two companies are assessing the E&E asset for impairment upon reclassification. Further, only four companies have specified the stage where E&E assets are tested for impairment, out of which only one company has allocated the E&E asset to CGU, and the remaining three are assessing it as well/area/mineral interest property.

Karapinar et al. (2012) have ignored this requirement also whereas Abdo (2016) has mentioned that 95 percent of companies comply with the requirements. With all due respect, the findings of Abdo (2016) have been disapproved as it is clearly evident that majority of the companies irrespective of their nationality are not strictly complying with these requirements. The fact that these are the biggest players in the world makes the matter worse because small companies and AIM-listed companies (that represent the majority of the sample in Abdo (2016)) are usually less compliant than blue-chip companies.

Table 3: Impairment of E&E Asset

Criteria	IOCL	Oil India	ONGC	RIL	Vedanta	Shell	BP	ENI	Gazprom	Total Co.
1 Whether the company has conveyed about the assessment of E&E assets for impairment?	Yes a	Yes[a]	Yes	No	Yes	Yes	Yes	Yes	No	Yes
2 Whether criteria of assessing the E&E assets for impairment mentioned in Accounting Policy?	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	Yes[b]
3 Which indicators of paragraph 20 are included in the above-mentioned criteria?	(c), (d)		(b), (d)		Yes	(b), (d)	(a)	(c), (b) (d)[b]		(b), (c)[b]
4 Whether above criteria also include assessing E&E asset upon reclassification? (Paragraph 17)	No		No		Yes	No	No	Yes		No
5 Whether accounting policy provides for allocating E&E assets to CGU(s) for impairment? (Paragraph 21)	No		No[c]		Yes	No[c]	No	No		No[c]
6 Whether accounting policy provides that each CGU(s), to which E&E Asset is allocated, is limited to an operating segment as per IFRS 8. (Paragraph 21)					Yes[d]					
7 Whether the level pointed for impairment assessment comprises one or more CGUs. (Paragraph 21)					One CGU					
8 Whether impairment loss of E&E asset has been disclosed? (Paragraph 2(b) and 18)	No[e]	Yes	Yes	Yes	Yes	Yes	Yes	Yes[e]	Yes	Yes

[a] IOCL and Oil India have disclosed the impairment assessment of only the intangible portion of E&E asset and not for the tangible portion. Thus all the further checking of compliance has been done with respect to intangible portion only.
[b] Though Total Co. has disclosed the impairment assessment of both tangible and intangible portion of E&E asset in point-1 of the above checklist yet it has provided criteria for tangible portion only as required in point 2 of the above table. Further, even this criteria includes only point (b) and (c) of paragraph 20. ENI on the other hand has disclosed the criteria for both tangible and intangible portion but this criteria includes only point (c) of paragraph 20 in case of tangible portion and only point (b) & (d) in case of intangible portion of E&E asset; thus, they have omitted other points of this paragraph.
[c] ONGC assess E&E assets for impairment at an Area level whereas Shell assess each exploratory well separately. Total co. on the other hand has adopted 'well by well' criteria for exploratory well and 'property by property' criteria for mineral interest. Thus all these companies do not allocate E&E asset to CGU for impairment.
[d] Though Vedanta has not made a clear-cut disclosure regarding this point, it allocates E&E asset to a single CGU only and generally a single CGU is not larger than an operating segment, therefore, positive conclusion has been drawn.
[e] IOCL has disclosed NIL impairment loss in FY'17; whereas in FY'18 & '19, even the line item of impairment loss has been removed. Hence it appears that the company is either not measuring the impairment loss or not disclosing it separately. However there might also be a remote possibility that company has not incurred any impairment loss in all these years. ENI has disclosed impairment loss in case of intangible portion of E&E asset but not in case of tangible portion in both FY'17 and FY '18 (as part of previous year's figure). Since the Annual Report of FY'16 and FY'17 as available on the official website of the company does not provide detailed notes accompanying financial statements, therefore, the compliance in these two annual reports could not be checked.

4.4. Accounting Method

IFRS 6 has not mentioned any method for accounting. This is the point where IFRS 6 has been criticized widely. There are two methods to account for E&E expenditure namely Successful Efforts Method (SEM) and Full cost Method (FCM). The successful efforts method is used in the oil and gas industry to account for certain operating expenses. Under the SEM, a company only capitalizes those costs associated with the location of new oil and gas reserves when those reserves have been found (ICAI, 2013). The full cost method is a cost accounting method used in the oil and gas industry. Under this method, all property acquisition, exploration, and development costs are aggregated and capitalized into a country-wide cost pool. This capitalization occurs whether or not a well is deemed successful (ICAI, 2013).

IOCL, ONGC, and ENI do not specify the method of accounting and all other companies follow SEM. Since different companies follow diverse accounting methods, it impairs the uniformity. IOCL and ONGC have stopped specifying the accounting method right after convergence with IFRS (because IFRS 6 has not mentioned any method of accounting).

Both Karapinar et al. (2012) and Abdo (2016) have reached a similar conclusion where a majority of the companies follow SEM. Accounting for the extractive industries has been a contested issue for decades as a result of a choice of different methods of costing available and the economic impacts of these methods on companies' financial results. When the International Accounting Standards Board (IASB) embarked on its extractive industries project in 1998, it attempted to create uniform accounting practices. The IASB's international accounting standard, IFRS 6, issued in 2004, once again permitted choice between methods, illustrating the effectiveness of the economic consequences' argument in perpetuating past practice (Cortese et al., 2009). ICAI (2016) in its Guidance Note (A) 15 (for entities out of the scope of IFRS) still recommends SEM.

4.5. Elements of E&E Assets

Paragraphs 9, 10 and 11 of IFRS 6 states that companies must formulate an accounting policy, listing the expenditures that form part of E&E Assets. An entity shall determine an accounting policy specifying which expenditures are recognized as exploration and evaluation assets and apply the policy consistently. In making this determination, an entity considers the degree to which the expenditure can be associated with finding specific mineral resources. For example, acquisition of rights to explore; topographical, geological, geochemical, and geophysical studies; exploratory drilling; trenching; sampling; and activities in relation to evaluating the technical feasibility and commercial viability of extracting a mineral resource (Paragraph 9).

Expenditures related to the development of mineral resources shall not be recognized as exploration and evaluation assets. The Conceptual Framework for Financial Reporting and IAS 38 Intangible Assets guide the recognition of assets arising from development. (Paragraph 10). In accordance with IAS 37 Provisions, Contingent Liabilities, and Contingent Assets an entity recognizes any obligations for removal and restoration that are incurred during a particular period as a consequence of having undertaken the exploration for and evaluation of mineral resources (Paragraph 11).

Further, as per IAS 37 Provisions, Contingent Liabilities, and Contingent Assets, a company shall also recognize the decommissioning liability as a result of E&E assets. Additionally, Paragraph 24 (a) states that to comply with paragraph 23, an entity shall disclose its accounting policies for exploration and evaluation expenditures including the recognition of exploration and evaluation assets.

Significant deviations have been observed in the disclosure of elements of E&E assets. Oil India provides quite extensive disclosure whereas Shell discloses merely a single item i.e., 'exploratory drilling cost'. Disclosures by all other companies are partial and do not meet all the requirements. Further Geological and Geophysical costs are expensed by RIL and Total, however, it is capitalized by Vedanta. Similarly, costs of surveys are expensed by Total and ONGC and capitalized by Vedanta. These kinds of irregularities might also exist in the case of other companies, which could only be known had they provided extensive disclosures.

This conclusion is similar to the conclusion drawn by Karapinar et al. (2012) and Abdo (2016). However, it appears that both the researchers have overlooked the most crucial point i.e., Non-inclusion of decommissioning liability to E&E asset. It is a major problem as it distorts the amount of E&E assets. It has been observed that out of ten, only four companies i.e., Oil India, ONGC, BP, and ENI includes the decommissioning liability in the amount of E&E asset and the remaining six companies do not comply with it. It emerges that they wait for the commencement of production before recognizing the decommissioning liability. This practice is a clear-cut violation of paragraph 11 of IFRS 6, further, it also leads to under booking of expenditure. Hence, it requires immediate attention from the management and auditors of the company.

4.6. Treating E&E Asset as a Separate Class of Asset

As per Paragraph 25, an entity shall treat exploration and evaluation assets as a separate class of assets and make the disclosures required by either IAS 16 (for the tangible portion

of E&E asset)) or IAS 38 consistent (for the intangible portion of E&E asset) with how the assets are classified. Paragraph 73 and paragraph 118 of IAS 16 and IAS 38 respectively list out the required disclosures. These disclosure requirements were studied and accordingly, checklists have been prepared separately for IAS 16 and IAS 38. In making these checklists some of the provisions are excluded as they are either not applicable to E&E assets or covered separately.

In Indian companies, ONGC, RIL, and Vedanta, and in global companies, BP, have disclosed the entire E&E assets as part of the intangible assets; therefore, all these companies are excluded herewith. As mentioned above, IOCL has disclosed the generation of 'Capital Work in Progress' (i.e. a tangible asset) therefore, the company is required to comply with these disclosure requirements given under IAS 16. However, it has only indicated the amount of ongoing oil and gas exploration and omitted all the other disclosures. Thus, it has not treated the E&E asset as a separate class of asset. Consequently, only five companies are left and their compliance level has been portrayed in Table-4. It has been observed that Total Co. has disclosed a separate line item for showing the opening and closing balance of E&E assets and omitted to provide the reconciliation of E&E assets. All other companies have provided some sort of incomplete disclosure requirements.

Paragraph 118 of IAS 38 specifies a wide range of disclosures for each class of intangible assets and Table-5 is being prepared in accordance with these requirements. All the Indian companies treat E&E assets as intangible assets; therefore, these requirements apply to all; however, RIL and IOCL have not provided even a single disclosure as required under paragraph 118. Hence, both of these companies have been excluded from the above table. Total Co. has provided disclosures in a similar style as of intangible portion i.e., disclosing merely the opening and closing balance and omitting reconciliation. The majority of the companies are disclosing merely 'additions', rather than splitting the same into different categories as required by the standard. Though the standard requires the companies to disclose the impairment loss and impairment reversals separately (Paragraph 118.e.iv and 118.e.v of IAS 38), except ONGC all the companies have disclosed just net impairment figures.

Similar deviations can also be observed in the case of companies that have provided some sort of disclosures required under IAS 16. Both Karapinar et al. (2012) and Abdo (2016), have completely ignored this point and not checked the compliance with this requirement at all.

4.7. Measurement and Recognition of E&E Asset

Paragraph 8 of the IFRS 6 states that **e**xploration and evaluation assets shall be measured at cost and Paragraph 12 of the IFRS 6 states that after recognition, an entity shall apply either the cost model or the revaluation model to the exploration and evaluation assets. If the revaluation model is applied (either the model in IAS 16 Property, Plant and Equipmen*t* or the model in IAS 38) it shall be consistent with the classification of the assets. It has been observed that all E&E assets are measured at cost at the time of initial recognition as well as subsequent recognition. Karapinar et al. (2012) had ignored this point

Table 4: Disclosures Required under IAS 16 (w.r.t. Tangible Portion of E&E Asset)

Particulars	Oil India	Shell	ENI	Gazprom	Total Co.
1 Whether the entity has shown the opening and closing balance of gross book value (including cumulative impairment losses) of E&E asset? (Paragraph 73 d)	No	Yes	No	No	Yes
2 Whether the entity has provided a reconciliation of such opening and closing balance of E&E asset? (Paragraph 73 e)	Yes	Yes	Yes	Yes	No
3 Whether the above reconciliation discloses the followings: (Paragraph 73 e)					
Additions (Paragraph 73. e.i)	Yes	Yes	Yes	Yes	
Assets classified as held for sale as per IFRS 5; (Paragraph 73. e.ii)	No	No	No	No	
Other disposals; (Paragraph 73. e.ii)	Yes	Yes	Yes	Yes	
Acquisitions through business combinations; (Paragraph 73. e.iii)	No	No	No	No	
Impairment losses booked under P&L account during the year; (Paragraph 73. e.v)	No	Yes	No	Yes	
Impairment losses reversed under the P&L account during the year; (Paragraph 73. e.vi)	No	No	No	No	
The net exchange differences on translation of the financial statements from the functional currency into a different presentation currency; (Paragraph 73. e.viii)	Yes	Yes	Yes	Yes	
Other changes (Paragraph 73. e.ix)	Yes	Yes	Yes	Yes	

Table 5: Disclosures Required under IAS 38 (w.r.t. Intangible Portion of E&E Asset)

	Particulars	Oil India	ONGC	Vedanta	BP	ENI	Total Co.
1	Whether the entity has shown the opening and closing balance of gross book value (including cumulative impairment losses) of E&E asset? (Paragraph 118. c)	Yes	Yes	Yes	Yes	Yes	Yes
2	Whether the entity has provided a reconciliation of such opening and closing balance of E&E asset? (Paragraph 118. e)	Yes	Yes	Yes	Yes	Yes	No
3	Whether the reconciliation statement has disclosed the followings:						
	Additions (Paragraph 118. e.i)	Yes	Yes	Yes	Yes	Yes	
	Additions from internal development (Paragraph 118. e.i)	No	No	No	No	No	
	Additions acquired separately (Paragraph 118. e.i)	No	Yes	No	No	No	
	Additions acquired through business combinations (Paragraph 118. e.i)	No	No	No	No	No	
	Assets classified as held for sale (Paragraph 118. e.ii)	No	No	No	No	No	
	Other disposals; (Paragraph 118. e.ii)	Yes	Yes	Yes	Yes	Yes	
	Impairment losses booked under P&L account during the year (Paragraph 118. e.iv)	Yes	Yes	No	Yes	Yes	
	Impairment losses reversed under the P&L account during the year (Paragraph 118. e.v)	No	Yes	Yes	No	No	
	Net exchange differences arising on the translation of the financial statements into the presentation currency; (Paragraph 118. e.vii)	Yes	Yes	Yes	Yes	Yes	
	Other changes. (Paragraph 118. e.viii)	Yes	Yes	Yes	Yes	Yes	

whereas Abdo (2016) provided a similar kind of conclusion where 99 percent of companies measure it at cost.

4.8. Other Disclosures

Paragraph 24(b) of the IFRS 6 states that to comply with paragraph 23, an entity shall disclose the amounts of assets, liabilities, income, and expense, and operating and investing cash flows arising from the exploration for and evaluation of mineral resources.

IOCL, RIL, BP, and ENI have provided the above disclosure; hence, it can be concluded that this requirement has not been complied with by most of the companies even though IFRS 6 has included all these requirements specifically in the disclosure section.

Again Karapinar et al. (2012) have ignored this requirement; however, the conclusion of Abdo (2016) matches with these findings as he mentioned that in the thematic analysis most of the companies did not comply with disclosure requirements. To discuss the areas of improvement in this reporting standard, paragraph 2 (c) mentioned in objectives needs to be studied which states that disclosures that identify and explain the amounts in the entity's financial statements arising from the exploration for and evaluation of mineral resources and help users of those financial statements understand the amount, timing and certainty of future cash flows from any exploration and evaluation assets recognized. However, this standard does not include any paragraph to provide information regarding future cash flows and IFRS 6 needs to improve in this area by including several requirements to achieve the above objective.

5. Conclusion

Merely having uniform accounting standards will not automatically bring uniformity; several regulatory attempts are required to ensure compliance with every requirement of such standard as well. The overall compliance ratio is as low as 41.54 percent and 43.68 percent for Indian and Global companies respectively. Both Indian and global companies, irrespective of their nationality, are not complying with even half of the requirements of IFRS 6; this is an alarming situation. Karapinar et al. (2012) had ignored investigating compliance with all the above parameters except point 5. Whereas Abdo (2016) has missed only point 6 and 7 but all the above findings (except point 4 and 5) contradict with his findings because of detailed content analysis applied in this study. Thus, the conclusion in this study is very distinct from prior studies. Following suggestions are submitted to improve IFRS 6: -

i. Consider allowing 'well by well criteria' for assessment of impairment, since it may lead to more conservative results as compare to CGUs. However, until such

improvements are carried out all companies need to assess E&E assets as per CGUs only.

ii. Provide clear cut recommendation of a single accounting method in favor of SEM. Till such time at least issue a clarification that all the companies are required to disclose the method of accounting. Findings show that ONGC and IOCL have stopped specifying the accounting method.

iii. Include those requirements that will help to achieve the part of the objective mentioned in paragraph 2 (c) asking to disclose the information that will help to understand the amount, timing, and certainty of future cash flows from any exploration and evaluation assets recognized.

Future researchers are encouraged to target this unexplored area (verifying the compliance with requirements of IFRS 6) by including other extractive companies, especially from developing countries.

References

Abdo, H. (2016). Accounting for extractive industries: Has IFRS 6 harmonized accounting practices by extractive industries? *Australian Accounting Review, 26*(4), 346–359. https://doi.org/10.1111/auar.12106

Alfaraih, M. (2009). *Compliance with International Financial Reporting Standards (IFRS) and the value relevance of accounting information in emerging stock markets: Evidence from Kuwait* (Doctoral Dissertation, Queensland University of Technology). https://eprints.qut.edu.au/36377/

Al-Shammari, B., Brown, P., & Tarca, A. (2008). An investigation of compliance with International Accounting Standards (IASs) by listed companies in the Gulf Co-Operation Council (GCC) member states. *The International Journal of Accounting, 43*(4), 425–447. https://doi.org/10.1016/j.intacc.2008.09.003

Bryman, A., & Bell, E. (2007). *Business research methods* (2nd ed.). Hong Kong, CN: Oxford University Press.

Cascino, S., & Gassen, J. (2015). What drives the comparability effect of mandatory IFRS adoption? *Review of Accounting Studies, 20*(1), 242–282. https://doi.org/10.1007/s11142-014-9296-5

Cortese, C. L., Irvine, H. J., & Kaidonis, M. A. (2009). Extractive industries accounting and economic consequences: Past, present, and future. *Accounting Forum, 33*(1), 27–37. https://doi.org/10.1016/j.accfor.2008.07.005

Dahawy, K., Merino, B. D., & Conover, T. L. (2002). The conflict between IAS disclosure requirements and the secretive culture in Egypt. *Advances in International Accounting, 15*, 203–228. https://doi.org/10.1016/S0897-3660(02)15024-0

Erchinger, H. (2012). IFRS in the United States: Developments and current status. *Australian Accounting Review, 22*(3), 248–256. https://doi.org/10.1111/j.1835-2561.2012.00179

Fekete, S., Matis, D., & Lukács, J. (2008). Factors influencing the extent of corporate compliance with IFRS: The case of Hungarian listed companies. *Annales Universitatis Apulensis Series Oeconomica, 1*(10), 2. http://dx.doi.org/10.2139/ssrn.1295722.

Glaum, M., & Street, D. L. (2003). Compliance with the disclosure requirements of Germany's new market: IAS versus US GAAP. *Journal of International Financial Management & Accounting, 14*(1), 64–100. https://doi.org/10.1111/1467-646X.00090

Glaum, M., Schmidt, P., Street, D. L., & Vogel, S. (2013). Compliance with IFRS 3 and IAS 36 required disclosures across 17 European countries: Company- and country-level determinants. *Accounting and Business Research, 43*(3), 163–204. https://doi.org/10.1080/00014788.2012.711131

Gray, S. J., Hellman, N., & Ivanova, M. N. (2019). Extractive industries reporting: A review of accounting challenges and the research literature. *Abacus, 55*(1), 42–91. https://doi.org/10.1111/abac.12147

Ha, M., & Kang, M. (2019). IFRS reconciliation adjustment and subsequent meet or beat target earnings. *The Journal of Asian Finance, Economics, and Business, 6*(1), 33–45. https://doi.org/10.13106/jafeb.2019.vol6.no1.33

Hodgdon, C., Tondkar, R. H., Harless, D. W., & Adhikari, A. (2008). Compliance with IFRS disclosure requirements and individual analysts' forecast errors. *Journal of International Accounting, 17*(1), 1–13. https://doi.org/10.22561/cvr.v29i1.3906

Holsti, O. R. (1969). *Content analysis for the social sciences and humanities* (2nd ed.). Austin, TX: Addison-Wesley Publishing Company.

The Institute of Chartered Accountants of India (ICAI). (2013). *Guidance notes on accounting for oil and gas producing activities: GN (A) 15.* https://resource.cdn.icai.org/29140guidance-ogpa.pdf

The Institute of Chartered Accountants of India (ICAI). (2016). *Guidance notes on accounting for oil and gas producing activities (for entities to whom it is applicable)*. https://resource.cdn.icai.org/44181research33961.pdf

Joshi, L., & Al-Mudhahki, J. (2001). An empirical study of compliance with International Accounting Standards (IAS-1) by stock exchange listed companies in Bahrain. *Journal of Financial Management & Analysis, 14*(2), 43.

Jung, D. J., Hur, J. A., & Jung, A. R. (2020). The precondition of benefits from IFRS Adoption: Financial statement comparability. *The Journal of Asian Finance, Economics, and Business, 7*(12), 255–265. https://doi.org/10.13106/jafeb.2020.vol7.no12.255

Karapinar, A., Zaif, F., & Torun, S. (2012). Accounting policies in the extractive industry: A global and a Turkish perspective. *Australian Accounting Review, 22*(1), 40–50. https://doi.org/10.1111/j.1835-2561.2011.00157

Nguyen, T. L. H., Le, T. H. P., Dao, N. M., & Pham, N. T. (2020). Factors affecting enterprises that apply the International Financial Report Standards (IFRS): A case study in Vietnam.

The Journal of Asian Finance, Economics, and Business, 7(12), 409–422. https://doi.org/10.13106/jafeb.2020.vol7.no12.409

Philipp, M. (2000). *Qualitative content analysis. Qualitative social research.* https://www.researchgate.net/publication/215666096_Qualitative_Content_Analysis/link/58c1fdff45851538eb7ce730/download

PricewaterhouseCoopers (PwC). (2011). *Financial reporting in the oil and gas industry*. https://www.pwc.com/id/en/publications/assets/eumpublications/financial-reporting-in-the-oil-and-gas-industry.pdf

Sharma, R. (2014). *Investing in the oil and gas sector in India.* Sana Securities. http://www.blog.sanasecurities.com/oil-gas-sector-india

Street, D. L., & Gray, S. J. (2001). Observance of International Accounting Standards (IASs): Factor explaining non-compliance by companies referring to the use of IAS. *Journal of International Accounting Auditing and Taxation, 74*, 1–128. https://doi.org/10.1016/S1061-9518(02)00054-X

Tower, G., Hancock, P., & Taplin, R. H. (1999). A regional study of listed companies' compliance with International Accounting Standards (IASs). *Accounting Forum, 23*(3), 293–305. https://doi.org/10.1111/1467-6303.00016

Tran, M. D., Ngo, T. T. M., Phan, T. U., Do, D. T., & Pham, T. T. H. (2020). Determinants influencing the conversion of financial statements: The case of multinational firms in Vietnam. *The Journal of Asian Finance, Economics, and Business, 7*(3), 17–27. https://doi.org/10.13106/jafeb.2020.vol7.no3.17