Accounting in the London Stock Exchange's extractive industry: The effect of policy diversity on the value relevance of exploration-related disclosures

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Abstract

The accounting treatment of exploration expenditure in the extractive industry has historically been a challenging issue for regulators. This paper examines the accounting policies for, and value relevance of, the exploration assets of firms listed on the London Stock Exchange from the oil & gas and mining sectors. The policies used by oil & gas firms range from the relatively conservative Successful Efforts to the most aggressive Full Cost method, whereas mining firms employ a range of policies from the Successful Efforts to the most conservative Expense All method. The results suggest that the income statements of Main Market-listed extractive firms contain value relevant information regardless of the policy followed by the firm. There is no significant difference between the value relevance of exploration asset disclosures by Main Market-listed oil & gas firms following the Successful Efforts or Full Cost methods. For AIM-listed oil & gas companies only the Full Cost method provides value relevant information on exploration assets. In the mining sector, exploration-related asset disclosures are only value relevant for AIM-listed firms following the Expense All method. The results suggest that flexibility in accounting for exploration expenditure is necessary to facilitate the disclosure of value relevant accounting information.

1. Introduction

The diversity of accounting policies used by extractive firms to account for exploration expenditure is a contentious topic. Historical attempts by major standard setting bodies such as the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) to standardise the treatment of exploration expenditure using the Successful Efforts policy have been unsuccessful (Asekomeh, Russell, & Tarbert, 2006; Cairnie, 1985; Cortese & Irvine, 2010; Cortese, * Corresponding author.
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Disparate methods of accounting for exploration expenditure in the extractive industry, together with the absence of United Kingdom (UK)-based empirical research, motivate us to study the alternative methods. To do so, we use data from companies listed on the London Stock Exchange (LSE) from both the Main Market and Alternative Investment Market (AIM) prepared under IFRS. This paper also differs from prior literature by separately analysing and comparing companies at each stage of the extractive life-cycle, whilst also considering mining firms in addition to the more-often studied oil & gas firms. The data runs from 2006 (2007 for AIM companies) until 2012 and includes both exploration and production-oriented companies.

Consistent with previous studies, the accounting policies of oil & gas firms are found to fall within two categories: the Successful Efforts and the Full Cost methods. In the mining sector, the categories of accounting policies used by firms fall on a more conservative spectrum between the Successful Efforts and Expense All methods. Prior literature on exploration expenditure prepared under the Successful Efforts and Full Cost methods has produced inconsistent results, partially due to differences in the types of extractive industry companies included in the respective samples. For example, Harris and Ohlson (1987) only included mature production-oriented companies in their sample, thereby excluding small exploration companies. To extend the literature in this area and provide results that may be useful to the future regulation of the accounting choices of extractive firms, all types of extractive firms require scrutiny and are therefore included in our sample.

Having undertaken a general value relevance analysis, the study then undertakes a value relevance analysis of the financial statements produced under each accounting policy. The paper also evaluates if the resistance to the Successful Efforts method (previously favoured by the FASB and the IASB) by small oil & gas companies (Cortese, 2011), can be justified by more than mere self-interest. Our results indicate that the flexibility currently availed of by firms in the extractive industry would appear to facilitate them in providing relevant information to investors. This has implications for the IASB’s apparent desire to implement the Successful Efforts method across all firms in the extractive sector.

The paper proceeds as follows: the next section describes the evolution of accounting in the extractive industry and also reviews the empirical evidence pertaining to accounting information in the extractive sector. The research design of the study is outlined in section three, while section four outlines the findings and section five offers some conclusions and comments on potential limitations of the study.

2. The development of accounting standards and empirical evidence in the extractive industries

2.1. The development of accounting standards in the extractive industries

Since the 1970s, accounting practices in the extractive industry have been the subject of vigorous academic discussion. The extractive industry includes firms which are involved in finding and removing wasting non-regenerative material located in or near the earth’s crust (International Accounting Standards Committee (IASC), 2000). The extractive cycle possesses several unique characteristics such as: extractive sites have finite lives, a weak relationship exists between initial costs incurred on exploration and the associated future economic benefits, the cycle involves high levels of risk and uncertainty, the cycle is capital intensive and the industry faces a greater degree of public accountability relative to other industries. The unique characteristics of the extractive cycle create challenges for traditional accounting conventions such as the revenue recognition and matching concepts (Cairnie, 1985; Luther, 1996; Trueman, 1975). Extractive firms have addressed these financial reporting challenges in a multitude of ways and a variety of accounting practices have been subsequently developed over time by them. Extractive firms quoted on the LSE are drawn from the oil & gas and mining sectors.

2.1.1. The oil & gas sector

Fundamental differences exist in relation to the capitalisation versus expense decisions and amortisation policies of oil & gas firms in relation to exploration expenditure. Firms in the sector have different views on exploration cost centres, with cost centres being defined as either wells, fields, areas, countries or the world (Trueman, 1975).

The two prevalent accounting policies in the oil & gas sector are termed the Successful Efforts and Full Cost methods respectively (Trueman, 1975). Under the Successful Efforts method, exploration expenditure is initially capitalised but if it is subsequently determined that a particular cost centre is not technically feasible or commercially viable, the exploration expenditure is written off. Followers of the Successful Efforts method generally define a cost centre in terms of a well, field or an area. In contrast, under the Full Cost method, exploration expenditure is capitalised and if the viability of a particular well, field or area is subsequently found to be non-viable, the exploration expenditure will be amortised against the revenue streams from successful wells, fields and/or areas. Firms which adopt the Full Cost method typically define a cost centre on a country or world basis.

1 The Alternative Investment Market (AIM) is the London Stock Exchange’s international market for smaller and growing companies, which aims to facilitate them in raising capital to fund their future expansion plans - http://www.londonstockexchange.com/companies-and-advisors/aim/aim/aim.htm (Accessed: 19th June 2017). This market has been included within the scope of this study so as to analyse smaller extractive firms which have historically resisted the standardisation of accounting practices for exploration expenditure in the United States and other countries.
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