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# Extractive industries accounting and economic consequences: past, present and future

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# Extractive industries accounting and economic consequences: past, present and future

## **Abstract**

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. An archival study of constituent responses to the IASB's Issues Paper revealed that the economic consequences argument was relied upon again to argue for retaining choice. 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.

Key words: economic consequences extractive industries, international accounting standards, financial reporting.

# 1. Introduction

Economic consequences, defined as the “impact of accounting reports on the decision-making behaviour of business, government, unions, investors and creditors”, were identified as a substantive issue in accounting policy making during the 1970s, representing a “veritable revolution in accounting thought” (Zeff, 1978, p. 56). As awareness of the economic consequences of accounting information increased, the notion of accounting as a technical and neutral practice gave way to perspectives which recognised accounting in its social and political contexts (Rappaport, 1977; Solomons, 1978; Zeff, 1978). The increasing influence of “outside forces” in the accounting standard setting process was considered by Zeff (1978, p. 56) who identified the way in which individuals and groups used the economic consequences argument to state their case for or against a particular accounting pronouncement .

One of the early uses of the economic consequences argument in accounting standard setting emerged in the debate concerning accounting for unsuccessful exploration activity in the petroleum industry in the United States (US) during the late 1960s. The full cost method first gained popularity in the US in the 1960s, primarily among small and medium sized exploration companies wishing to improve the appearance of their financial statements (Van Riper, 1994, p. 56). In 1964, the American Institute of Certified Public Accountants commissioned a study to investigate the successful efforts versus full cost issue, the results of which were published in 1969 and recommended the narrowing of accounting practices and supported the use of the successful efforts method. However, oil and gas companies were successful in persuading the US accounting standard setter to postpone consideration of the different costing methods available, arguing that a switch of

methods would adversely affect the performance and growth of small, independent exploration companies (Zeff, 1978). While this controversy came to the fore in the 1960s, the need for a standardised approach to extractive industries accounting was recognised as early as 1905:

I hope that the time is approaching when the system of standardisation will be extended to mining costs and mining accounts. At the present the methods for each of these are legion, and seem designed to conceal rather than reveal the financial position; but there must be some one method, in accounts especially, which is best of all (Curle, 1905, p. 29, cited in Luther, 1996, p. 67).

Despite the early and repeated recognition of a need for a standardised approach and the amount of controversy this issue has generated, Wise and Spear (2000, p. 30) recently observed that accounting and disclosure practice of enterprises engaged in the extractive industries can “at best be described as inadequate and might reasonably be referred to as an outstanding example of accounting flexibility”.

The debate resurfaced again at an international level in 1998 when the then IASC added to its agenda a project aimed at addressing accounting and disclosure issues in the extractive industries (International Accounting Standards Committee, 2000a). The IASC recognised the difficulties and uncertainties associated with accounting in the extractive industries, and that the resultant divergence in accounting policies and practices had been significant inhibitors to the comparability of mining companies (International Accounting Standards Committee, 2000a). However, despite the proposal of the IASC to have only one costing method, the eventual outcome of the project, *International Financial Reporting Standard 6 (IFRS 6)*, was merely codified existing industry practice thereby perpetuating choice between accounting methods.

The objective of this study is to place the ongoing full cost versus successful efforts controversy with its historical context and explain how the economic consequences argument has been, and continues to be, used by powerful extractive industries players to thwart standard setters' efforts to eliminate full cost accounting and thereby perpetuate the status quo of choice in accounting methods. In the following section, the economic consequences associated with extractive activities and the accounting methods that developed over time to cope with the risks associated with extractive operations are considered. The paper then outlines the history of the full cost versus successful efforts debate and the early attempts of the US accounting standard setter to achieve consensus on this issue and limit accounting alternatives. Next it charts the progress of the IASB's extractive industries project and the influence of key constituents on the outcome of the project. This is followed by a discussion of the likely influence of extractive industries constituents on the international accounting standard setting process in the future, and the continuation of the economic consequences argument. Finally, conclusions are presented, along with limitations and opportunities for further research.

## **2. The economic consequences of extractive industries accounting**

The extractive industries have been defined as the petroleum (oil and gas) and mining industries that are involved in "finding and removing wasting natural resources located in or near the earth's crust" (International Accounting Standards Committee, 2000a, p. 14). The process of finding these natural resources is referred to as the pre-production phase and involves those exploration and evaluation activities that are undertaken to determine whether a resource deposit exists, and whether its extraction is economically viable (International Accounting Standards Committee,

2000a). The risks associated with extractive operations are significant, and have been described as “endemic to the industry” (Wise & Spear, 2002, p. 3). The exploration and evaluation phase is arguably the most risky given the high proportion of dry holes relative to successful projects (Katz, 1985; Wise & Spear, 2002). Companies may spend millions of dollars on an exploration effort only to find that variables such as development and production risk, changing technology, time horizons, market risk, and the legal and political environment render the project uneconomical.

The costs associated with these pre-production activities are accounting for according to historical cost conventions (Bryant, 2003). There are several different methods that have developed over time to determine the value of these costs, with the most common being the full cost and successful efforts methods. Under the full cost method, all acquisition, exploration, and drilling costs, including those relating to unsuccessful activities, may be capitalised and carried forward until such time as they can be written off against revenue from successful projects (Flory & Grossman, 1978). In contrast, under the successful efforts method, only those pre-production costs that relate directly to successful projects can be matched against revenue from the successful project (Katz, 1985). The choice of method produces different results, as demonstrated by the example in Exhibit 1.

**Exhibit 1: the income effect of using the successful efforts versus full cost methods**

Assume that a petroleum company spends \$4 million on exploration in each of five drilling sites during 2001 and that the company discovers oil on two of the sites. The other three sites are "dry holes", that is, unsuccessful projects. The two productive sites are expected to produce ten million barrels of oil, one million of which are produced and sold for \$50 each during 2001. The full cost versus the successful efforts results are shown below, assuming no taxes or other expenses.

	<b>Full cost</b>	<b>Successful efforts</b>
<b>Revenue</b>		
(1 million barrels at \$50 each)	\$50,000,000	\$50,000,000
<b>Expenses</b>		
Cost of unsuccessful efforts (3 sites)	not applicable	\$12,000,000
Cost of goods sold*	\$2,000,000	\$800,000
Total expenses	\$2,000,000	\$12,800,000
<b>Income</b>	\$48,000,000	\$37,200,000
<p>* Pre-production costs are typically amortised on a units of production basis regardless of whether the full cost or successful efforts method is used (Flory &amp; Grossman, 1978; Katz, 1985). Therefore, cost of goods sold is calculated by dividing the total cost by the expected units of production and multiplying this by the number of units produced and sold during the period.</p>		
Cost of goods sold under the full cost method =	$\frac{\$20,000,000}{10,000,000} \times 1,000,000$	
Cost of goods sold under the successful efforts method =	$\frac{\$8,000,000}{10,000,000} \times 1,000,000$	

Adapted from Amernic (1979, p.36)

This example provides evidence of the impact that a change in accounting methods has on a company's income figure. The economic consequence of using the full cost method is a 23 percent increase in reported income over the successful efforts result. Other examples of the economic consequences of a change in costing method include Conquest, a petroleum company based in North America, which reported in 1985 as a full cost company, posting a \$3.7 million profit, but later restated its results under successful efforts accounting and recorded a \$17.1 million loss (Editorial, 1986). Premier Oil, an oil producer based in the UK, also switched accounting methods from full cost to successful efforts in 2004, resulting in a downward restatement of profits from \$44 million to \$22 million (Neveling, 2005).



In each of these three examples, a higher profit was reported under full cost accounting, but this may not always be the case. The accounting method that produces the most favourable results depends on whether the reporting entity is small and in its early stages of exploration, or larger and more able to absorb the cost of unsuccessful efforts. Consequently, one method is not favourable to all companies. This has resulted in controversy when accounting standard setters attempted to prohibit use of the full cost method to achieve uniformity in reporting, with the economic consequences of these differing results being used as an argument for the continuation of choice in accounting methods.<sup>1</sup>

Despite frequent and early calls for standardisation of extractive industries accounting there has been surprisingly little regulation, arguably because of the economic significance and associated influence of this sector (Deloitte Touche Tohmatsu, 2001b; Luther, 1996; Wise & Spear, 2000). Economically, the extractive industries are a powerful force, with many of the major extractive industries companies being richer and more powerful than the states and even countries that seek to regulate them (Global Policy Forum, 2006). Indeed, a report by Anderson and Cavanagh (2000) found that, of the largest 100 economies in the world, 51 were global corporations and only 49 were countries. Included in this list of global corporations were international petroleum companies ExxonMobil, the Royal Dutch/Shell Group, BP, E.On, and TOTAL (Anderson & Cavanagh, 2000). Updating Anderson and Cavanagh's (2000) statistics with current information shows that six of the world's top twelve companies are from the extractive industries, being BP, Chevron/Texaco, ConocoPhillips, ExxonMobil, the Royal Dutch/Shell group, and

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<sup>1</sup> It should be noted that there is no difference in the underlying economic reality regardless of whether the full cost or successful efforts method is used and, ultimately, capital markets will adjust prices depending on the method employed. The economic consequences argument, therefore, is primarily used in support of a particular lobbying position.

TOTAL (Fortune Magazine, 2005). In 2005, these six companies recorded combined revenues in excess of US\$1.2 trillion and profits of US\$92 billion (Fortune Magazine, 2005). Comparing the combined revenues of these six global companies with current US Gross Domestic Product of US\$11 trillion (World Bank, 2005) gives some perspective of the enormous economic strength of the major international extractive industries companies.

Given the significant economic consequences of the choice of accounting method, it is hardly surprising that extractive industries companies have favoured flexible reporting practices that enable them to choose the methods of accounting for pre-production activities that present their activities in the most favourable manner. The seeming unwillingness of legislators and accounting standard setting bodies to regulate the reporting of extractive industries companies may indeed be because of the economic significance and associated political influence of the enterprises and the distinctive nature of their activities. The next section traces the history of the successful efforts versus full cost debate, which has been described as the “first full-blown controversy about an accounting standard and probably the most intensely politicised accounting argument ever” (Van Riper, 1994, p.56).

### **3. The past: a history of the debate**

The full cost versus successful efforts controversy first came to prominence in the US during the 1960s. The full cost method had gained popularity among small and medium sized exploration companies wanting to improve the appearance of their financial statements (Van Riper, 1994). The method, dubbed “no-cost accounting” by its critics, was adopted by hundreds of companies that argued full cost accounting was essential to their capital raising efforts and therefore enabled them to pursue

exploration programs that would be oil reserves and ultimately benefit all of the US (Van Riper, 1994, p. 56). The American Institute of Certified Public Accountants (AICPA) commissioned a study in 1964 to investigate the full cost versus successful efforts issue, the results of which supported the use of the successful efforts method (Flory & Grossman, 1978; Van Riper, 1994, p. 56). The study was reviewed again in 1970 with a view to narrowing alternative practices (Flory & Grossman, 1978, p. 56; Van Riper, 1994). However, when the Financial Accounting Standards Board (FASB) took over accounting standard setting responsibility from the AICPA in 1973, it declined to add oil and gas accounting to its agenda, a move which has been described as an exercise of “caution, or even wisdom” (Van Riper, 1994, p. 56).

In that same year the world oil crisis took hold, leading to a shortage of oil exports from the Middle East and a quadrupling of world oil prices (Fehner & Holl, 1994). These conditions underscored the importance of countries having their own sources of energy, or at least having companies willing to seek energy sources. The energy crisis demonstrated the need for unified energy organisation and planning and it became evident that energy and conservation legislation would be enacted (Fehner & Holl, 1994; Van Riper, 1994, p. 55). In anticipation of this legislation, the FASB then added to its agenda a project aimed at addressing issues related to financial accounting and reporting for exploration and development costs in the extractive industries (Van Riper, 1994, p. 57).

The *Energy Policy and Conservation Act*, which came into effect on 22 December 1975, stipulated that the Securities and Exchange Commission (SEC) establish standardised accounting practices for the extractive industries within two years (Katz, 1985). Foreshadowing the FASB’s inclusion of the project on its agenda,

the SEC subsequently delegated the responsibility of setting the accounting standard to the FASB, however the provisions of the Act specified that the SEC's final approval of the standard was required (Van Riper, 1994, p. 55). A task force, comprising 18 members including company executives, accountants, financial analysts, and investment bankers with special expertise in the oil and gas industry, was established to lead the project and develop the accounting standard.

At the end of March 1977, a discussion memorandum was published which was followed by an Exposure Draft, *Financial Accounting and Reporting by Oil and Gas Producing Companies*, in July of that year, five months before the statutory deadline set out by the Act. These documents proposed that the successful efforts method be mandated as the single method of accounting for oil and gas pre-production costs (Flory & Grossman, 1978; Van Riper, 1994, p. 62). Following the release of the Exposure Draft, the oil and gas industry launched an intense lobbying effort against the proposals. This lobbying effort was led by the smaller, independent oil and gas companies that used and relied on the full cost method to account for their exploration activity. Proponents of the full cost method stressed the importance of accounting methods which promoted aggressive exploration programs, given the energy shortages in the US at the time. At a public debate concerning the FASB's proposals, the founder of Mesa Petroleum, T. Boone Pickens, stated that the full cost method had enabled his company to capitalise its exploration costs and grow its assets from US\$4 million to US\$600 million in 12 years, and to increase revenues from US\$1.5 million to US\$100 million over that period (Van Riper, 1994). Pickens said that had the elimination of full cost accounting been proposed at the time his company was formed, he would have "probably been on [his] knees, pleading for full cost accounting" (Pickens, 1977, cited in Van Riper, 1994, p. 59). Full cost companies

argued that the successful efforts method would curtail the US oil and gas industry because it discouraged companies from engaging in exploration, especially risky ventures, for fear of having immediately to write off the cost of unsuccessful efforts (Katz, 1985; Van Riper, 1994, p. 61).

In the light of this pressure, the SEC decided against its original plan to adopt whatever decision the FASB made, and agreed instead to review the FASB's pronouncements, hold public hearings and solicit written comments on the issue early in 1978 (Van Riper, 1994, p. 65). During the ensuing period, an Ad Hoc Committee on Full Costing was formed by industry constituents to target high level political leaders at the SEC, Washington Senate, Department of Energy, Department of Justice and the Federal Trade Commission (Van Riper, 1994). Many on the receiving end of this lobbying commented that they had "never seen such aggressive lobbying in their Washington careers" and described the issue as "improperly politicised" (Gorton, 1991, p.30 cited in Van Riper, 1994, p. 64).

Finally, the "clout" of the independent oil and gas companies prevailed. On 29 August 1978, the SEC officially withdrew its support for the FASB's proposed accounting standard, Statement No. 19, *Financial Accounting and Reporting by Oil and Gas Producing Companies*, marking the only instance (at that stage) in which the SEC had declined to support the FASB (Van Riper, 1994, p. 70). Statement No. 19 was left in place but was amended by Statement No. 25, which suspended its effective date indefinitely. This meant that oil and gas companies could continue to use either the full cost or successful efforts method (Katz, 1985). At the same time, the SEC also concluded that neither the full cost nor the successful efforts method provided relevant information for decision making, proposing instead to develop a "reserve

recognition” method which would eventually become the required method of accounting (Johnston, 2005; Katz, 1985; Macintosh & Baker, 2002; Van Riper, 1994, p. 70). However, in February 1981 the SEC abandoned the project and instead endorsed FASB Statement No. 69, *Disclosures about Oil and Gas Producing Activities*. This Statement was issued to improve the quality of financial reporting in the oil and gas industry but was considered a compromise in the light of the failure to achieve uniformity in financial reporting (Katz, 1985; Van Riper, 1994, p. 70).

While this debate was raging in the US, Australia’s standard setting body<sup>2</sup> released its first exposure draft on accounting for the extractive industries in February 1973, coinciding with a “mini-boom” in the primary products and minerals export markets (Whittred et al., 1996, p. 397). Shortly thereafter, the Australian economy entered a recession and it was almost four years after the exposure draft that Statement of Accounting Standards DS12 was released in 1976 (Whittred et al., 1996, p. 397). This was significant because Australia was the first and only country to have a standard developed specifically for the extractive industries. The standard essentially dealt with accounting for exploration and evaluation expenditure, and required that these pre-production costs be expensed. However it did permit that, under certain circumstances, these costs could be carried forward, but only to the extent that they had been incurred in the two years immediately preceding the reporting date (Whittred et al., 1996, p. 397). These requirements had not appeared in the exposure draft and, prior to the release of the standard, most companies’ capitalised pre-production expenditure until the mine site was abandoned. The provisions of DS12 were vehemently opposed by extractive industries companies, particularly by smaller exploration companies that argued they could not afford to

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<sup>2</sup> The Accounting Standards Review Board (ASRB) that initiated this process has since been reformed and renamed and is now the Australia Accounting Standards Board (AASB).

write off exploration expenditure against income each year (Whittred et al., 1996, p. 397).

In response to pressure from extractive industries companies, DS12 was revised and reissued in December 1977 without the two year limitation for capitalisation of pre-production expenses (Whittred et al., 1996, p. 397). In other words, this meant that Australian companies were to use a derivative of the successful efforts method, the area-of-interest method.<sup>3</sup> The standard was again reissued, without amendment, as Australian Accounting Standard 7 (AAS 7) in August 1979. The provisions of AAS 7 were then incorporated into AASB 1022: *Accounting for the extractive industries*, which received statutory backing in October 1989 (Whittred et al., 1996, p. 397).

While in Australia choice was limited by the requirement that extractive industries companies adopt a successful efforts method, specifically the area-of-interest method, both the successful efforts and full cost methods continued to be permitted for use by extractive industries companies in the US, as well as Canada and the UK, which also followed US practice (Amernic, 1979; Pratt, 1990). While many of the major extractive industries corporations, such as ExxonMobil, BP and the Royal Dutch/Shell Group, used the successful efforts method, full cost accounting continued to be popular with smaller companies that relied on this method to help build asset reserves and improve profit figures, which in turn assisted them with debt

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<sup>3</sup> An area of interest was defined as an individual geological area and usually comprised a single mine or deposit, or a separate oil or gas field (Australian Accounting Standards Board, 1989, p. 5). Like the successful efforts method, under the area-of-interest method, pre-production costs were to be capitalised if they related to a successful project, and were matched against revenues from the project (International Accounting Standards Committee, 2000a). The costs were to be capitalised also if the stage of the project prohibited an assessment of the viability of the area-of-interest (Australian Accounting Standards Board, 1989, p. 8). Consistent with the successful efforts method, if pre-production costs related to an unsuccessful project, they were to be written off as incurred or once that assessment was made (International Accounting Standards Committee, 2000a).

financing and capital raising (Baker, 1976; British Petroleum plc, 2004; ExxonMobil Corporation, 2005; Frazier & Ingersoll, 1986; International Accounting Standards Committee, 2000a; Royal Dutch/Shell Group, 2004; Van Riper, 1994, p. 58). The debate was not over however, with the emergence of the IASC and its recognition that accounting for the extractive industries was an international accounting issue.

#### **4. The present: the IASB's extractive industries project**

Given the history of this debate, it might be imagined that there were lessons to be learned which would assist the International Accounting Standards Board (IASB)<sup>4</sup> in its efforts to respond to the need for a global accounting standard. The international prominence, economic influence, and divergent accounting practices of the extractive industries were listed as factors contributing to the importance of the project, which aimed to address accounting measurement and disclosure issues (International Accounting Standards Committee, 2000a). The project was led by an internationally representative Steering Committee, with members from Australia, Canada, Germany, India, Italy, South Africa, Switzerland, the United Kingdom (UK), and the US (International Accounting Standards Committee, 2000a; Micallef, 2001).<sup>5</sup> The Steering Committee members' professional backgrounds were varied and included chartered accountants, company executives, academics, and financial analysts.

The Steering Committee reached its first milestone in November 2000, with the publication of the Extractive Industries Issues Paper. The Issues Paper was a 412

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<sup>4</sup> The process of developing an international accounting standard for the extractive industries was first undertaken by the International Accounting Standards Committee (IASC) and has been continued by the International Accounting Standards Board since its restructure in 2000. Therefore, where relevant, this paper refers to the IASC/IASB.

<sup>5</sup> The Chairman of the Steering Committee, Ken Spencer, was the former Chairman of the Australian Accounting Standards Board (International Accounting Standards Committee, 2000a).



page document consisting of 16 chapters, which raised a number of “Basic Issues” concerning matters such as reserve estimation and valuation, recognition and measurement of inventories, and financial statement disclosures (International Accounting Standards Committee, 2000a). It was published with an invitation for interested parties to comment by 30 June 2001 on the matters raised. In addition, given the “widespread interest” in the project, the Steering Committee also sent the Issues Paper to “senior financial officers of nearly 300 extractive industries companies worldwide” with a direct request for comment (International Accounting Standards Committee, 2000b, p. 19). To guide commentators, the Issues Paper set out the Steering Committee’s tentative views on some of the issues considered most significant and stated that “the Steering Committee favours adoption of a method more consistent with the successful efforts concept than with the other concepts” (International Accounting Standards Committee 2000a, p. 88).

Respondents to the Issues Paper were required to indicate their preferences on the Basic Issues raised and thereby indicate their agreement or disagreement with the Steering Committee’s tentative views. Fifty-two responses were received from constituents located in countries including Australia, Canada, China, Germany, South Africa, the UK, and the US. The principal activities of the respondents were varied and included mining and petroleum companies, extractive industries lobby groups, international accounting firms, professional accounting bodies, standard setting bodies, and academics (International Accounting Standards Committee, 2001).

Preliminary content-type analysis revealed that 85 percent of respondents that commented on the full cost versus successful efforts issue supported the Steering Committee’s proposal to eliminate full cost accounting and require companies to

report using the successful efforts method. This analysis, however, was considered to be limited in three respects: first, *who* is making a particular argument and *what* is being said is masked by the aggregation of responses. Secondly, the relationships between the respondents and other key (but perhaps less visible) participants in the process remains hidden. Finally, based on the preliminary analysis, there appeared to be little conflict among respondents with respect to the full cost versus successful efforts issue, which is contrary to the long-standing and intense debate that has surrounded this matter. To overcome these limitations and investigate the responses in greater detail, a critical discourse analysis of respondents and their responses was undertaken to gain greater insight into the relationships between constituents, the arguments presented, and how these arguments influenced the outcome of the international accounting standard setting process.

Unsurprisingly, the respondents that supported the proposal to eliminate the full cost method were the major extractive industries companies, or organisations representing these companies such as external audit firms, that were already using the successful efforts method. In contrast, those respondents that argued for the preservation of choice in accounting methods were small, independent exploration companies arguing that they relied on the full cost method to improve the appearance of their financial statements and adequately reflect their business operations. In addition, the petroleum industry lobby groups also argued strongly for the preservation of both the successful efforts and full cost methods of accounting for exploration and evaluation costs. Both of these groups of constituents used the economic consequences argument in support of their responses. Excerpts from the comment letters that used this argument are presented in Table 1.

**Table 1: Using the economic consequences argument to support retention of both the full cost and successful efforts methods**

<b>Constituent</b>	<b>Nature of operations</b>	<b>Issues Paper response</b>
Paladin Resources plc	Independent oil and gas exploration and production company based in the UK.	"We strongly believe that both successful efforts and full cost methods of accounting for petroleum activities should be retained. The methods used to account for costs should reflect the size and nature of a particular company's activities and this cannot be achieved if a single successful efforts method is adopted. Investors in newer and smaller companies will be looking at totally different performance criteria to those required from more established and larger companies" (Paladin Resources plc, 2001, p. 1)
American Petroleum Institute (API)	Petroleum industry lobby group representing over 400 member companies involved in all aspects of the oil and natural gas industry.	"The US oil and gas industry has accounted for its operations in accordance with [standards that have] provided the flexibility to account for the petroleum industry under either a successful efforts concept or a full cost concept. When the [issue] was first considered 20+ years ago there was much debate between the successful efforts and full cost concepts and that debate continues today. We support the practice of allowing an enterprise to choose among the successful efforts and full cost accounting models in the primary financial statements" (American Petroleum Institute, 2001, p. 2).
Oil Industry Accounting Committee (OIAC)	UK oil and gas industry lobby group formed to represent the views of industry constituents in various accounting forums.	"OIAC is of the view that it would be wrong to restrict companies to using one method of allocating costs. The way that decisions are made on prospecting and exploration activity by major companies and by the smaller "independent" sector can be very different. Indeed the majority of UK listed [exploration] companies account under the full cost method. In practice, OIAC considers that the choice of selecting either successful efforts or full cost enables companies to properly reflect their particular decision taking process in their financial statements, and therefore should be retained" Oil Industry Accounting Committee, 2001, p. 2).
Canadian Institute of Chartered Accountants	Professional accounting body. An Advisory Committee was established to develop the response,	"Junior mining companies play a very significant role in the Canadian mining industry and the accounting standards should address the needs of these companies, their shareholders and other

comprising representatives from ten Canadian mining and petroleum companies plus two audit partners with extensive backgrounds in the extractive industries.

users of their financial statements. The full cost method is extensively used in Canada. A transition to successful efforts should only be done following consultations with affected companies, including the development of clear and practical transition rules" (Canadian Institute of Chartered Accountants, 2001, p. 5).

As shown in Table 1, the arguments for the retention of both methods focus on allowing flexibility in reporting methods, providing an accurate reflection of management decisions, and supporting the needs of the smaller, independent exploration companies. These arguments mirror those that were advanced by full cost proponents during the FASB's attempt to narrowing accounting alternatives for the oil and gas industry in the 1960s and 1970s. Interestingly, it was the strength of the lobbying efforts of coalitions of full cost proponents, similar to the API and the OIAC, which prevented the FASB from eliminating the full cost method. With the IASB also unable to achieve consensus on this matter, and instead issuing a standard which perpetuates choice in accounting methods, it appears that there is a clear case of history repeating itself.

At the time the Issues Paper was published, the IASC was in the midst of restructuring. Plans for the development of the extractive industries project came with the caveat that "the restructured IASC Board will have to decide its own agenda and priorities", and indeed it did (International Accounting Standards Committee, 2000a, p. 5). In July 2001, the IASB announced that it would restart the project only when agenda time permitted (International Accounting Standards Committee Foundation, 2003, 2004). Then, in September 2002, the IASB announced that it was not feasible to complete a comprehensive extractive industries project and formulate an

international accounting standard by 1 January 2005, the deadline set for the adoption of international accounting standards in many jurisdictions (International Accounting Standards Board, 2004a).

Instead, on 15 January 2004, the IASB issued Exposure Draft 6 *Exploration for and Evaluation of Mineral Resources* (ED 6) (International Accounting Standards Board, 2004c). The Exposure Draft was intended to make limited improvements to accounting practices for exploration and evaluation activities and was considered an interim measure in lieu of a comprehensive international accounting standard for the extractive industries. The purpose of the proposed standard was to enable those entities reporting exploration and evaluation assets to comply with IFRS<sup>6</sup> while not requiring major changes that may need to be revised once a comprehensive extractive industries project was completed (International Accounting Standards Board, 2004c).

The essence of the Exposure Draft was that existing extractive industries companies could continue to use the accounting policies already in place before the application of IFRS (International Accounting Standards Board, 2004b). Therefore, no accounting changes were required to be made by extractive industries entities in order to comply with IFRS. In terms of the successful efforts versus full cost issue, this meant that companies were permitted to continue to use whichever method was deemed most appropriate by management. Exposure Draft 6 proposed that companies would be required to perform an impairment test on exploration and evaluation assets, however, apart from this requirement, the status quo was to remain largely unchanged

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<sup>6</sup> When the extractive industries project was initiated, the standards developed by the IASC were known as International Accounting Standards (IASs). When the IASC was restructured and renamed the IASB in 2001, the IASB also renamed the accounting standards to International Financial Reporting Standards (IFRSs). The standards issued by the IASC continue to be designated IASs (International Accounting Standards Board, 2004a). Although the international accounting standard for the extractive industries was commenced by the IASC, the final standard was issued by the IASB, and so is referred to as an International Financial Reporting Standard.

for the extractive industries (International Accounting Standards Board, 2004c).

The comment period for the Exposure Draft was open until 16 April 2004. Unsurprisingly, given the absence of any substantial changes to existing accounting practices, there was little opposition to the proposals of the Exposure Draft. The proposals were later incorporated into IFRS 6 *Exploration for and Evaluation of Mineral Assets*, which was published on 9th December 2004, to take effect from 1 January 2005 (International Accounting Standards Board, 2004c). The chronology of the extractive industries project undertaken by the IASC, and carried over by the IASB, is also summarised in Table 2.

**Table 2: Chronology of the IASC/IASB extractive industries project**

April 1998	Extractive industries project was added to the IASC agenda and an Extractive Industries Steering Committee was established by the IASC.
November 2000	Extractive Industries Issues Paper was published and opened for public comment.
April 2001	Restructured Board introduced. IASC becomes the IASB.
June 2001	Comments due in respect of Issues Paper.
July 2001	Restructured IASB postpones consideration of extractive industries project.
September 2002	IASB decides against completing a comprehensive extractive industries standard for adoption in 2005.
January 2004	Exposure Draft ED 6, Exploration for and Evaluation of Mineral Resources issued and opened for public comment.
April 2004	Comments due in respect of ED 6.
December 2004	IFRS 6 Exploration for and Evaluation of Mineral Assets issued by the IASB for adoption in 2005.

As shown in Table 2, six years elapsed between the commencement of the project and the issue of IFRS 6. Significantly, even with the international accounting standard in place, there continues to be no definitive accounting guidance for extractive industries companies. Instead, IFRS 6 merely codifies established, disparate, and largely unregulated industry practice. As noted, in the US case, where “using its considerable political might, the industry succeeded in persuading the board to postpone consideration of the sensitive subject” (Van Riper, 1994, p. 219), it

appears that in the international arena history has again repeated itself. As shown in the following section, it appears that the status quo may continue for some time.

## 5. The future: the IASB's extractive activities research project

On the date IFRS 6 was released, the IASB also announced that it had formed a group of national standard setters from Australia, Canada, Norway, and South Africa to undertake a comprehensive research project that would work towards resolving the accounting issues faced by extractive industries entities (International Accounting Standards Board, 2006a). An advisory panel was established to provide advice throughout the project, comprised of individuals from entities engaged in the extractive industries, analysts and other users of financial reports, auditors, and securities regulators. The advisory panel members are summarised, according to the groups they represent, in Table 3.

**Table 3: Advisory panel members, according to representation**

		Constituent representation					Total
		Oil and gas companies	Mining companies	Auditors	Analysts and other users	Securities regulators	
Geographic representation	Africa	1	2	1	2		6
	Asia-Pacific	3	3	1	1		8
	Europe	3	3	1		1	8
	North America	3	1	2	1	1	8
	<b>Total</b>	10	9	5	4	2	30

Table 3 reveals that the majority of panel members are drawn from oil and gas and mining companies. On the one hand, this appears reasonable because the panel is able to rely on the expertise and experience of these members, however this group of constituents also has the most to lose or gain from changes to the accounting methods available to them for reporting. This situation arguably contributes to the

development of a dependency relationship between the standard setter and the industry it is attempting to regulate. As noted by Cousins and Sikka (1993, p. 53), the information gathered during the due process may be “controlled by the very people/groups who are being called to account”. In other words, the “facts” surrounding an issue may be shaped by the priorities and influence of powerful groups who wish to maintain the status quo (Cousins and Sikka, 1993, p. 4).

The most recent board discussion on the extractive activities research project was an IASB Education Session held at the IASB’s head office on 16 October 2006. The information paper distributed to observers for this discussion considered the viability of the fair value method as a basis for measurement and disclosure of reserves and resources (International Accounting Standards Board, 2006b). It also noted that historical cost models (for example the full cost and successful efforts methods) were preferred by industry constituents for measurement and disclosure purposes.

The possibility of a fair value basis of accounting was canvassed during the Issues Paper stage of the project, with many respondents relying on economic consequences to argue against this proposal. For example, BHP Ltd argued that, although fair values provide more useful information to the users of financial statements, many factors impede objective or reliable valuation and would result in significant fluctuations between reporting periods (BHP Ltd, 2001). Similar arguments were advanced by Deloitte (Deloitte Touche Tohmatsu, 2001a) and KPMG (KPMG, 2001). The Oil Industry Accounting Committee argued in a similar vein that using the fair value approach would make the market “very sensitive to the short term views of the prices of the commodities being produced and this could bring significant



swings to the carrying amounts which would not add to the usefulness of financial statements” (Oil Industry Accounting Committee, 2001, p. 5).

While the October 2006 discussion session concluded that a comprehensive analysis of these methods was required to ensure that the Board has a “solid platform upon which to engage with industry and users on accounting for extractive industries”, a discussion paper based on this analysis was not expected to be issued before mid 2007 (International Accounting Standards Board, 2006b). Given the preliminary views of constituents gathered during the Issues Paper stage, and the profile of the Advisory Panel members, it is likely that a choice of historical cost bases for measurement and disclosure of reserves will be retained at least in the medium term.

## **6. Conclusions**

This paper has traced the way in which the economic consequences argument has been used by extractive industries constituents as a means of maintaining choice in accounting methods and financial reporting. It has focussed on the controversy surrounding the two main methods of accounting for pre-production activities in the extractive industries, successful efforts and full cost. Much of the early debate was centred in the US, where the efforts of the FASB to limit choice were thwarted by the SEC, responding to pressure exerted by extractive industries constituents. However, choice was limited in Australia, the only country to develop an industry-wide accounting standard which specified the use of the area-of-interest method, a derivative of the successful efforts method. The IASC reignited the debate when it established its extractive industries project in 1998. However, the eventual outcome of the project, IFRS 6, failed to eliminate choice and instead merely codified existing industry practice.

The futile efforts of the IASB to change the status quo replicate the history of the debate in the US and the inability of the FASB to effect change. In both cases, there was an initial recognition that accounting across the industry ought to be standardised and comparable. The inclusion of the extractive industries issues on the agenda of both the FASB and the IASC was followed in both cases by a process whereby constituents were able to influence the outcome to achieve perpetuation of accounting flexibility. The economic strength of the extractive industries, and associated lobbying influence, arguably intensified the weight of their arguments for the retention of both the full cost and successful efforts methods of accounting for exploration and evaluation costs. This influence is likely to continue in the future and could be the subject of further investigation.

The focus of this paper has been limited to an overview and a preliminary explanation of the way history has repeated itself in the matter of accounting for the extractive industries. It requires further investigation, either from an internal point of view from within the standard setting body (Walker, 1987) or from a more detailed examination of the constituents and their relationship with, and responses to, the IASC/IASB. The high stakes involved in the extractive industries worldwide, the necessity of the IASB to maintain a transparent independence in the setting of international accounting standards, and the continuation of the IASB's extractive industries research project, make further investigation into this issue imperative.

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