# · PERFORMANC MEASUREMENT FOR OIL AND GAS COMPANIES: FUNCTIONAL CURRENCY

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## Overview

The oil and gas industry is dynamically changing, with its participants ranging from large national oil companies to small independent companies. To determine which companies outperform the others, it is important to have a yardstick to measure the performance of oil and gas upstream companies. Functional currency is the currency of the primary economic environment in which an entity operates (Eiteman et al, 2016). It is important to adopt a strategic approach to selecting functional currency, when used as a performance measurement tool. This study categorized oil and gas companies into four groups - (1) major oil companies, (2) national oil companies, (3) national flag oil companies and (4) others (independent oil and gas companies) - to identify the general tendencies, and aims to answer the following questions regarding functional currency: To what extent do the managements of oil and gas companies have the ability to choose their functional currencies discretionally? Do functional currencies differ depending on the type of energy company? Are the general tendencies among oil and gas upstream companies considered in choosing functional currencies? If so, why do the functional currencies differ? To what extent do they have the ability to change them discretionally? Why do the managements of oil and gas companies change their functional currency? What type of events cause functional currency change? Thus, it is necessary to shape accounting strategies to address issues related to functional currencies.

## **Methods**

- Literature survey of previous studies regarding functional currencies.
- Data survey of financial statements of the top 50 oil and gas companies, ranked by Petroleum Intelligence Weekly (PIW) in 2016, to identify the general trends for each type of oil and gas upstream company.
- Data survey of oil and gas upstream companies that changed their functional currencies in the past.

#### Results

- The literature survey confirms that the managements of oil and gas companies were given some discretion to choose functional currency although they were under similar oil and gas upstream operating conditions.
- The data survey categorized the top 50 oil and gas companies, as ranked by PIW in 2016, into four groups (1) major oil companies, (2) national oil companies (government-owned oil and gas exporting companies), (3) national flag oil companies (oil and gas importing companies, wholly or partially owned by government) and (4) independent oil and gas companies (no government ownership involved) and surveyed each company's functional currency, presentation currency, and accounting rules.
- The survey identified five oil and gas companies that changed their functional currencies in the past. These five companies are: (1) Statoil in Norway, (2) the UK subsidiary company of JX Holdings, Inc. in Japan, (3) Aker BP in Norway, (4) Lukoil in Russia, and (5) PTTEP in Thailand.

# **Conclusions**

- Previous studies confirm that the managements of multinational companies have the ability to choose their functional currencies under US GAAP to the extent that it fulfills parameters specified by the accounting rules. The data survey also identified some oil and gas companies in the UK Alba field, under the UK GAAP and IFRS accounting principles, who decided to have the different functional currencies under the same project. Thus, the managements are given some discretion to choose the functional currency, provided it fulfills the parameters specified by the accounting rules.
- Major oil companies all use US\$ as their functional currency. ExxonMobil and Chevron have both adopted the US GAAP, while Royal Dutch Shell and BP have adopted the IFRS as their accounting principles. National oil companies (NOCs) have a clear tendency to select their own national currencies as functional currencies, except for four companies, namely PDV in Venezuela, Pertamina in Indonesia, Statoil in Norway, and YPF in Argentina. Among NOCs, Statoil and YPF are the only companies whose functional currencies are different from their presentation currencies. National flag oil companies also showed clear tendency in terms of

selecting their functional currencies. The 9 out of the 10 companies use their own national currencies as functional currencies; *Total* in France is the only company whose functional currency is not their own national currency. The survey revealed that three companies, *Total* in France, Petrobras in Brazil, and BG in the UK, are the only companies whose functional currencies differ from their presentation currencies. Among independent oil and gas companies, Reliance is the only company whose functional currency differs from its presentation currency. According to Lukoil's annual report in 2015, its accounting principles have changed from the US GAAP to the IFRS; and their functional currency has also changed from US dollars to Russian Rubles. With these changes, the functional and presentation currencies of four Russian ranked companies, Lukoil, Surgneftegas, Novatek, and Tatneft, became Russian Rubles. Except for Lukoil in 2014, BHP Billiton in Australia and Reliance in India are the only companies whose functional currency (US\$) is different from their own native currency.

When oil and gas companies change their functional currencies, their managements' discretion is seemingly limited. Statoil changed their functional currency from NOK to US\$ in 2009, triggered by a change in company structure. JX UK changed their functional currency in 2014 and subsequently, incurred significant impairment losses. PTTEP and Lukoil changed their functional currencies in 2011 and 2015 respectively, along with the change in accounting rules. The managements of E&P companies have some discretion in choosing their functional currency. However, when the functional currency changes, the management's discretion to change it becomes limited, and requires events, such as structural changes, business circumstance changes, or change in accounting principles, as leverage.

# References

- Aoki, T., Sawai, K., Tenpaku, J., and Futaesaku, N. (2016) "Takokuseki Kigyoo no Zaimuhookoku nikakaru Ronten Seiri Kaikei Kijyun no Kokusaiteki Choowa no Dookoo wo Fumaete (in Japanese)," ("Points Concerning the Financial Reporting of Multinational Corporations Based on the Trend of International Harmonization of Accounting Standards") *IMES Discussion Paper Series*, Discussion Paper No. 2016-J-8, Institute for Monetary and Economic Studies, Bank of Japan, pp. 1-37.
- Arnold, J. and Holder, W. (1986) "Impact of Statement 52 on Decisions, Financial Reports and Attitudes," Financial Executives Research Foundation.
- Bagheri, S. and Minin, A. (2015) "The Changing Competitive Landscape of the Global Upstream Petroleum Industry," *Journal of World Energy Law and Business*, Vol. 8, No. 1, pp. 1-19.
- BP Global (2016) "BP Energy Outlook 2016 Edition-Outlook to 2015," pp. 1-98.
- Doupnik, T. and Evans, T. (1988) "The Functional Currency Determination: A Strategy to Smooth Income," *Advances in International Accounting*, Vol. 2, pp. 171-182.
- Eiteman, D., Stonehill, A., and Moffett, M. (2016) "Multinational Business Finance" Global edition (14th Edition), Pearson
- Kikkawa, T. (2010) "Sekiyu Kaihatsu Business niokeru Nihon Kigyoo no Dookoo (in Japanese)," ("Japan's International Competitiveness in the Petroleum Exploration Business," *Journal of JBIC International Research Office*, Japan Bank for International Cooperation (JBIC), No. 4, pp. 98-116.
- Mehta, D. and Thapa, S. (1991) "FAS-52, Functional Currency, and the Non-comparability of financial reports," *International Journal of Accounting*, Vol. 26, No. 2, pp. 71-84
- Nobes, C. (2006) "The Survival of International Differences under IFRS: Towards a Research Agenda," *Accounting and Business Research*, Vol. 36 No. 3, pp. 233-245.
- Penrose, E. T. (1968) "The Large International Firm in Developing Countries; The International Petroleum Industry," George Allen and Unwin Ltd.
- Pirog, R. (2007) "The Role of National Oil Companies in the International Oil Market," Congressional Research Service. pp. 1-20.
- PwC Japan (2016) "Enerugi Shigen Tooshi no Kaikei Jitsumu (in Japanese)," ("Accounting Practice of Energy Resource Investment Oil and Gas E&P companies, from Obtaining Interests to Decommissioning Wells,") Chuoh Keizai Sha.
- Revsine, L. (1984) "The Rationale Underlying the Functional Currency Choice," *The Accounting Review*, Vol. 59, No. 3, pp. 505-514.
- Stevens, P. (2016) "International Oil Companies: The Death of the Old Business Model," *The Royal Institute of International Affairs*, Chatham House. pp. 1-46.
- Yergin, D. (1990) "The Prize The Epic Quest for Oil, Money and Power," Simon & Schuster.