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Theoretical-methodological aspects of assessing supplies and finance reporting in oil companies

The article deals with the analysis of current practice of financial accountability in oil and gas sector according to foreign standards. During recent years the reforming of National Financial Reporting Standards became more active as the existing practice of accountancy in Kazakhstan doesn't meet in full the needs of external customers in providing them with the information about operation of a company. As a result companies report their financial statements using standards of financial accountability of some foreign countries or International Financial Reporting Standards. The article considers the following questions: a survey of standards of financial accountability used by Kazakhstani oil companies for their stockholders and investors; analysis of current practice on International Accounting Standards in oil and gas companies; review on Generally Accepted Accounting Principles in the USA concerning accounting procedure in oil and gas extraction; development prospects of national standards and regulations of accounting procedure in oil and gas extraction.
Keywords: financial reporting, oil companies, standards to financial reporting, assessing supplies, methods of resources assessment.

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Теоретико-методологические аспекты оценки запасов и составления финансовой отчетности в нефтяных компаниях

В статье проведен анализ сложившейся практики составления финансовой отчетности в соответствии с иностранными стандартами в нефтегазовой отрасли. В последние годы активизировался процесс реформирования национальных стандартов финансовой отчетности, так как существующая казахстанская практика бухгалтерского учета не в полной мере отвечает потребностям внешних пользователей в раскрытии информации о деятельности компании. В результате компании подготавливают свою отчетность, используя бухгалтерские стандарты отдельных зарубежных стран или Международные стандарты финансовой отчетности. В статье рассматриваются следующие вопросы: обзор стандартов финансовой отчетности, используемых казахстанскими нефтегазовыми компаниями для представления акционерам и инвесторам; анализ текущей практики применения МСФО компаниями нефтегазовой отрасли; обзор практики Общепринятых принципов бухгалтерского учета США в отношении учета деятельности по добыче нефти и газа; перспективы развития отечественных стандартов и правил для учета деятельности по добыче нефти и газа.
Ключевые слова: финансовая отчетность, нефтяные компании, стандарты финансовой отчетности, оценка запасов, методы оценки запасов.

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Мұнай компанияларында қорларды бағалау және қаржы есептемелерін дайындаудың теориялық-әдіснамалық аспектілері

Бұл мақала қазіргі таңда мұнай компанияларымен қолданылатын қаржы есептемесін шетел стандарттарына сай дайындау тәжірибесін талғауына арналған. Қазақстан мұнай компаниялары қолданатын қаржы есептемесінің стандарттары талғауға салынды. Ерекше назар босалқы қорлар бағалауына аударылған.
Түйін сөздер: қаржылық есептемелер, мұнай компаниялары, қаржылық есептеменің стандарттары, қорларды бағалау, қорларды бағалау әдістері.

In Message of President of the Republic of Kazakhstan to People of Kazakhstan of December 14, 2012, N.A. Nazarbaev announced that oil-gas complex of Kazakhstan is the locomotive for the whole economy and promotes development of other branches. It is necessary to create up-to-date, effective oil-and-gas branch. In this connection, oil and gas industry significantly effects the national economy but now not as a raw sector, but as fast developing sector with high value added [1]. The Republic has significant explored supplies of oil and gas of industrial categories, and also promising and expected resources, being secure basis for further development of oil and gas complex.

Considering widening the sphere of oil-and-gas sector opportunities, issue of making reports in the given area deserve separate examination. At present, the practice of accounting and opening information at oil enterprises is characterized with significant variety and is not dependable upon the degree of centralization in company management system [2]. Many questions of finance reporting connected with the activity of extracting companies arise because of special conditions under which those companies work. These companies finance reporting must reflect risks and benefits appropriate for the given sector.

The companies of extracting sector possess following characteristic features:

1) high risk degree - high degree of risk is typical for extracting sectors because the money spent on prospecting new mineral resources will not result in origin of additionally extracted commercial. From the point of view of finance reporting, this means that there will be uncertainty relating to if certain expenses would result in assets arising. Risks are also typical for extracting. The volume of actual extracting may significantly differ from earlier determined volume, and the price for good is often changeable;

2) weak link between risks and profits means that in extracting branches small costs may result in founding mineral deposits the cost of which many times exceeds the cost. And vice versa, large expenses are often connected with insignificant amount of product, produced in future or its total absence. This conditioned the appearance of various approaches to financial reporting;

- charging of all costs to expence, because the future profits are too indefinite;

- capitalization of all expenses, as total expenses may be compared with total profit, or

- recognition of found mineral deposits for Fair value;

3) long time period between expenses and extraction means that mineral exploration completing may take years. During this time it is not clear enough if there is any profit against expenses;

4) high cost of certain objects is the cost of certain projects, e.g., projects for oil and gas extracting from offshore field may be rather high. The amount spent on exploration, capitalized before the moment of assessing success of the project in purchasing and developing the deposits, may be significant relating to capital and total company assets;

5) unique types of agreements about spending distribution mean large spending and high degree of risk. Companies working in extracting sector conclude agreements about sharing risks (for example, joint stock companies, agreements for interest, agreements for semi-passive interests and developing deposits according to contract agreement).

6) increased control and regulating from the state part. Control of extracting sectors is variable from "direct government property rights on minerals up to unusual tax remissions or penalties, price control, limiting import and export, limiting extracting and realization, nature conservation law, on-the-job safety, etc." governments also try to take definite economic rent for extracted resources;

7) rare non-refundable assets. Mineral resources are unique and rare resources which can not be fully restored by the companies at the same area;

8) economy, technological, and political factors though these factors are not just applicable only in extracting sector, they tend to effect extracting sector in larger degree because of the following reasons:

а) fluctuating market prices for mineral resources (along with floating exchange rates) directly effect profitability of mineral resources and deposits. Relatively small percent changing of long-term price may change the decision about reasonability of exploration, developing deposits and minerals extracting, and convenient moment;

б) string effect from changing costs and product engineering. Cost changes and engineering, which may be more essential, may significantly effect the profitability of some projects connected with minerals;

в) almost in all countries the state has the right for minerals extracting. In those countries where such rights are partially private dependence of population from minerals resources concerning economy and defense often leads to governmental regulation

and control. In other cases government policy may be changed with the goal of collecting specific taxes or governmental extracting sector control.

Exploration and extracting oil and gas demand large investments and are connected with several risks and possible profits. Similar activity is subjected to risk which directly connected with complexity of underground exploration, hydrocarbons properties, and also physical features of oil and gas deposits. Geological risks are typical for the first stage of exploration. For example, hydrocarbons may not be found in prospecting hole or their quantity is low for development starting. Even if reasonability of the deposit development is proved by the data of economic analysis of hydrocarbons expected resource, the resource volume may be smaller than expected, which will negatively effect economic development.

State control is typical for oil sector and also participating of the government in the following issues:

- determining share in development and extraction;
- approving annual programs (especially projects for development) by the government or partner controlled by the government, or selecting contractors or suppliers;
- stating definite boring responsibilities;
- environment protection;
- control for the deposit development and finishing work there which results in extraction limiting;
- estimating costs which may be compensated by corresponding organs and also costs deducted for taxation;
- possible though rather rare nationalization, expropriation, and modification of rights according to agreement.

Oil-producing industry also subjected to paying royalty and taxes, the amounts of which may be rather high comparing to other types of commercial activity and they also may significantly be changed by the governments of some countries.

USA generally accepted accounting principles (GAAP) now are used by largest Kazakhstan oil companies, and relatively small companies use International Accounting Standards (IAS) as a foreign accounting standard. In USA GAAP the principles of accounting oil-and-gas producing activity were developed by Financial Accounting Standards Board (FASB):

USA GAAP FASB 19 is fiscal accounting and reporting for oil and gas extracting companies;

USA GAAP FASB 69 is opening information about extracting oil and gas;

Great Britain GAAP is the best practice of opening information;

IAS 6 is exploration and assessment of mineral resources

The companies whose stocks are in demand, also must satisfy the requirements presented by (SEC), presented in guidelines S-X Rule 4-10.

Taking into consideration the sector specific character the user of financial accounting needs additional opening of information about oil companies activity and their major assets (oil and gas reserves). USA GAAP standards include the requirements for extra information content.

Standard IAS 6 “Exploration and Assessment of Minerals Resources” gives definition to exploration and assessment of resources as activity for exploration of mineral resources including oil, gas, and other minerals and similar non-renewable resources; and also determining feasibility of extraction [3].

According to IAS 6 the costs for exploration and assessment are first reflected in accounting in actual amount. These costs depending upon their gist must be related to fixed assets or intangible assets.

After primary reflecting in the account the costs for exploration and assessment are accounted on the basis of actual price or on the basis of revalued amount, using the standard requirements of corresponding cost classification.

The standard gives effect to the requirement about testing costs for exploration and assessment in case of depreciation if there are indications that reflected book value can not be compensated. The examples of such indications may be close time of right termination for exploration and development, when their extension is not expected; and also the decision about lay-off in a certain area.

Loss from depreciation occur when balance-sheet asset value is higher than compensation value. Compensation value is the highest of realization net capital or its use value (presented value of future money flows expected from assets use, or a unit generating money flows).

Information about cost and number of resources is very important for the company management. Clear determining resources assessment method and in-time made correction in the process of economical activity will favorably effect the company image.

They distinguish the following methods of resources assessment in fiscal accounting in oil and gas activity:

- successful efforts accounting;

- full cost method;
- additional disclosures FAS 69.

Successful efforts accounting, SE is the method at which only successful efforts accounting are capitalized as oil and gas assets. Total expenditure, costs relating to empty exploration holes, costs for other fixed assets are written off to period expense. Amortized cost of capitalized expense is charged off using manufacturing method of amortization. Purchasing expense are amortized on the basis of proved resources. Development costs are amortized on the basis of proved developed resources. To determine amortization objects they make definite aggregation of property as large as field [4].

Full costs accounting, FC is the method when all expense connected with purchasing, exploration, development (and even on "dry" holes) is capitalized as oil and gas assets. Amortized cost of capitalized expense is amortized using amortizationmanufacturing method. Expenses present fixed assts that are amortized on the basis of proved resources. To determine the amortization objects they make certain aggregation of property country by country. Net price minus deferred Tax must not be larger than net present value after tax future money flows from proved resources.

In the account of European oil companies the assets are reflected upon their primary cost being the basis for all following account stages. According to full cost accounting principles the asset cost may change with the lapse of time, it is determined as subjective process not connected with real value.

According to FC principle, recording in asset balance sheets - oil and gas - practically do not characterize their real cost. If, for example, a company after concluding lease agreement opens oil resources of a million barrels, there will be nothing changed in balance sheets because it reflects only connect cost minus all amortization forms. To justify this system they bring a conservative argument, "How accurately are open resources assessed?" GAAP system ignores substantial increase of economic value, nevertheless, bookkeepers neglect it completely. Within the framework of stated concept the assets must be registered in the balance sheets according to their cost if brought by them profit (their economic value) does not decrease.

As international experience show, accounts of oil sector enterprises are based on the principle reflecting income only after closing or at rigid price fixing. Some specialists consider that this principle is entirely applicable to oil sector, others suppose that it is not applicable at all because primary assets of an oil and gas company are belonging to it natural resources, and their cost is not reflected directly in the balance sheets. Neither balance nor profit-and-loss report allow to do proper calculation of oil and gas deposit opening in that accounting period when this opening takes place. In terms of accountancy there is no mechanism allowing to report about opening raw materials resources, information about new deposit is reflected in income account only since the date when operation starts, though economical cost of the deposit is formed at the moment of its opening.

But what is real economical value of the object bringing profit? This is a bookkeeper first and completely natural question, because very different opinions concerning resources volumes and raw material quality are possible at the moment of deposit opening.

Correspondence principles in International Financial Reporting Standards announces the necessity of correspondence of income and expense made for its getting. It is a sticking point for bookkeepers because it is rather difficult to state the correspondence of expense for oil and gas exploration and profit from their extraction.

In GAAP system the assets reflected in balance sheet include capitalized primary cost. Profit is calculated upon the development of natural resources, but not for the period of exploration or resources assessment. Besides, there are two cost keeping systems used in global practice for oil and gas sector for exploration based on full costs accounting, FC and successful efforts accounting, SE. Income is usually admitted for the moment of extracted raw material extraction.

Fundamental difference between both methods in correspondence of income to expense for exploration. The most valued assets of an oil company such as reserves (resources) of oil and gas are not fixed by accounting system.

Significant role in forming expenses is still left to expenses for exploration. These are expenses for:

- renting deposit (costs connected with getting the rights for leasing or concession, and also the rights for exploration and extraction of hydrocarbons);
- exploration (geological exploration of oil and gas, geological and geophysical survey, test boring, and so on);
- deposit development (boring expenses, storage building, processing capacity, etc.);

- operation expenses (expenses for lifting raw material on the surface, expenses for processing, transportation, etc.).

Analysis of these expenses are not complicated excluding the expenses for deposit exploration. In this case one may use one of two methods: either SE or FC.

Major difference between the systems SE and FC is in size and use of objects expense account. This is the thing that fives financial effect. Under conditions of using SE method expenses for maintenance such object may be stopped up to complete confidence in possibility of economically meaningful extraction volumes. Expenses at hole reception or lease agreement as expenses center increase at decline of well and are capitalized at new resources discovery. Here the decision is highest degree subjective. Sometimes the beginning of new drilling may be delayed because of undesirable consequences for fiscal accounting for the period, which is connected with the possibility of hole small debit.

If FC system is used, the expenses center is a country or the whole planet. Therefore, all expenses are capitalized regardless of discovering new resources, and they will appear not in the profit report but in balance sheets. In this case net profit increases, and profitability of used capital decreases.

Accounting FC system requires writing-off balance cost of assets (oil and gas) in case if it exceeds stated by special controlling organs resources cost which is called upper boundary of oils and gas cost according to balance sheets. Fixed capitalized expenses connected with hydrocarbons extraction are limited with net resources cost with 10% discount. This is resources cost upon the conditions of controlling organs or standard resource assessment.

Capital decreasing and partial writing-off are possible also when they use account method SE, but, as a rule, they are not that significant, because major part of expenses for exploration is not capitalized but spent. But according to conservatism principle current cost of oil and gas in SE system may be partially written off if their economical cost is less than the registered one. To be sure there is no loss of value because of boring negative results or approaching the agreement ending they periodically use revaluation procedure. This method of depletion accounting is essentially conflicting, and at present the largest oil companies are refused to use it although independent firms can use it.

Thus, in accounting of oil companies it is most important to determine the method of fiscal accounting. If an enterprise prefers just expenses for successful holes to capitalize them as oil and gas assets, they use successful efforts accounting. In case of capitalization all expenses including even expenses for "dry" holes, they use full cost method. The credibility of fiscal accounting is dependent upon the correctness of assignment expenses for account objects; this reflects the results of managers activity for controlling trusted resources. Such information helps the users of fiscal accounting in prediction of company future money flows, particularly, their time and specificity.

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