THE PECULIARITIES OF ESTIMATED VALUE FOR SMALL AND MEDIUM-SIZED ENTERPRISES OF OIL AND GAS SERVICE

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Keywords: oil-and-gas service, estimated value, income approach, forecasting activity, bottom price, amendment of return, capacity of the workforce, intangibles, current cost.

In this article the author considers the cost approaches appraisal of the enterprises. The procedure of estimated value of small and medium-sized enterprises of oil-and-gas service within the limits of income approach is presented, which helps to define the minimum value of appraisal object and the value, considering its competitive advantages.

In oil and gas complex (OGC) of Russia small and medium-sized businesses are the so-called "independent manufacturers of oil and gas" and oil-and-gas service enterprises.

The enterprises of oil and gas service ensure the appropriate level of extraction and transport of hydrocarbons, performing specialized works and providing the service to the enterprises of oil and gas branch. Engineering and development and field facilities construction concern the given works and services, capital and current workover, automation of production field, enhanced oil recovery, building and servicing pipelines and offshore structures, engineering services in OGC, etc.

In the conditions of market economy it is important to know how to evaluate the cost of similar companies as they are subjected to mergers and acquisitions both from the side of the Russian vertical-integrated companies, and from the side of the largest Western enterprises.

Estimated value is one of the sections of econometrics, studying the concrete quantitative interrelations of economic units and processes. Any procedure of estimated value in essence is the instrument intended for measuring the value.

There are 3 approaches for the estimated value of the enterprise: income, cost and comparative (market).

The question is: which one is suitable for estimating the value of small and medium-sized enterprises of oil-and-gas service that are not joint-stock companies and whose shares are not quoted on the stock market? Such companies often have no expensive fixed assets, carry out their activity in the leased areas, but their annual turnover can reach one billion roubles.

The cost approach does not allow to estimate the value of a service company, as it doesn't require any serious capital investment. Is it possible to use the comparative approach? Probably, but only in the case of sufficient available data on similar companies which allows to provide a representative sample for comparison. These circumstances hinder the use of the comparative (market) approach for the estimated value of small and medium-sized enterprises of oil-and-gas service.

There is also the income approach which assumes the analysis of the potential to generate a certain income. This approach is used more often in practice, as it has a number of advantages. Within the limits of the income approach there are 2 methods: the discount cash flow approach and the capitalizing procedure. The latter is rarely used because it presupposes the availability of equal streams of income, whereas in the first method the streams of income vary.

One of the most important problems in the estimated value of the service companies is the fact that the ability to forecast income is often hindered, because the companies of small and medium-sized business have more short-term contracts than longer-term ones. In practice it leads to their understated value for the transactions on purchase and sale of small and medium-sized enterprises of oil and gas service.

The authors of the present research are inclined to believe that within the limits of the income approach it is possible to figure out the value of small and medium-sized enterprises of oil and gas service, even though there are certain risks connected with the process of contraction, and therefore with the ability to forecast the income.

* Viktor V. Pochtar, post-graduate student of Samara State Technical University. E-mail: Pochtar_VV@mail.ru.

The basic stages of the enterprise estimation within the limits of the suggested procedure are reduced to the following:

1. The retrospective analysis of activity of the enterprise.

2. The forecasting of enterprise income and expenditure.

3. The definition of the current value of the enterprise.

The first stage is imperative because the retrospective data represents the base for the further accounts for the purpose of the value determination of the enterprise. The retrospective analysis of activity of the enterprise is a method of studying the basic financial and economic indicators, the retrospective income analysis of the enterprise and the analysis of the enterprise expenditure. As a result within the limits of the first stage the valuator should draw conclusions on the financial and economic condition of the enterprise as a whole, outline the centers of income of the estimable enterprise and draw up the adjusted expense budget for the previous financial year.

Forecasting activity of costs and revenues of the enterprise for the purpose of the calculation of its value consists in the definition of duration of the forecast period, the analysis and the forecast of costs of the enterprise, the analysis and the forecast of investments of the enterprise, the definition of the standard profit of the enterprise, the definition of expected revenues of the enterprise.

Thus, the minimum necessary incomes of the enterprise (target revenue) are defined as the total of the final value of the planned expense budget and the standard profit of the enterprise.

Thus, the target revenue is calculated by the following formula:

$$Д_t = \sum З_t + (N_p^t \cdot \sum З_t),$$

where D t is total income per annum t; " $З_t$ is total cost per annum t; N_p^t is profit rate per annum t.

The received size of the standard profit and income requires updating as in practice the value of the profit often differs from the standard one. For this purpose it is necessary to use the following formula:

$$К_{КД} = К_{КП} + К_{НМА},$$

where $К_{КД}$ is the factor of updating of incomes; $К_{КП}$ is the factor of capacity of the workforce; $К_{НМА}$ is the factor of intangibles.

The factor of capacity of the workforce (the goodwill of capacity of the workforce) is the factor reflecting the real market-value of the workers of the organization. It is necessary to estimate the value of each worker as a person possessing certain professional skills. Criteria for the estimation and possible values of the indicators are presented in table 1.

The factor of intangibles (the goodwill of intangibles) is the factor reflecting the real market-value of all rights to the results of intellectual activity and means of innovation and customization (invention of a more useful model, industrial standards, trademarks, know-hows, copyrighted objects), and also the value of the business reputation of a firm.

The factor of intangibles is calculated by the following formula:

$$К_{НМА} = \frac{С_{НМА}}{Д},$$

Table 1

The combined table of criteria for the definition of capacity of the workforce ($К_{кп}$)

№	The indicator name	The value of indicator				
		high	above the average	average	below the average	low
1	Professional level of the worker	1,4	1	0,8	0,5	0
2	The psychological climate in the collective	0,3	0,25	0,1	0,05	0
3	Time necessary for the adaptation of the new worker, month	0,3	0,25	0,1	0,05	0
4	**The factor of capacity of the workforce (Ккп)**	**2**	**1,5**	**1**	**0,6**	**0**

Table 2

Account of the rate of discounting by a build-up method

№	The indicator name	The value of indicator
1	Risk-free rate	%
2	Key person in the administration, manageability	0-5%
3	Size of the company	0-5%
4	Financial structure	0-5%
5	Territorial and industrial diversification	0-5%
6	Diversification of the customer base	0-5%
7	Risk of contraction (Forecast ability of income)	0-5%
8	Sovereign risk	0-5%
9	SUM-TOTAL the rate of discounting	Σ № 1-8

where C_{HMA} is intangible value; $Д$ is the income per forecast and previous periods.

The updating of the forecasted incomes of the estimable enterprise is carried out in two basic variants: base and expert. As a base variant it is necessary to equal the factor of updating the income to a unit. And expert variant should consider the features of the estimable enterprise and settle up on the basis of expert appraisals of the capacity of workforce and intangible value.

The last stage in an estimation is the account of the current value of the enterprise which within the limits of a discount cash flow approach traditionally includes the account of the amount of cash flow, the account of risks (account of the rate of discounting), the account of current values of the future cash flow and cost during the post-forecast period.

The main issue at the stage of accounting the current value of the estimable enterprise is the account of the rate of discounting. At the stage of its definition there are many problems and questions as the discounting rate considerably influences today's value of cash flow. The rate is traditionally defined by the summing up of the elements mentioned in table 2.

Thus, the preliminary project of the estimation allows to define the current value of the estimable enterprise.

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