

FETDE 2020
International Conference on Finance, Entrepreneurship and Technologies in
Digital Economy

THE ANALYTICAL CONTENT OF THE FINANCIAL STATUS OF
OIL PRODUCTION ENTERPRISE

Ahmed Abd Zaid Abedi (a)*
*Corresponding author

(a) Ural State University of Economics, Ekaterinburg, Russia, University of Kufa, P.O Box 21, Kufa, Najaf
Governorate, Iraq, najafahmed7@gmail.com

Abstract

The analysis of the financial position of the enterprise according to balance sheet data and the report on financial results is given. The key indicators for assessing the financial status of the oil production enterprise are identified, the most significant for oil companies: the assessment of profitability, evaluation of business activity and assessment of the efficiency of enterprise management, liquidity assessment, solvency analysis, financial stability analysis. Based on the selected indicators, the rating of the financial status of the oil production enterprise is given. The analysis of the financial status of the enterprises of oil production was carried out and earlier, but on the separate oil extracting companies on the basis of the general technique of the analysis of a financial state. The author has given a technique of the complex analysis of the financial status for the enterprise of oil extracting branch, evaluates its attractiveness for investors, the level of solvency, liquidity, and the level of the financial stability is estimated.

2357-1330 © 2021 Published by European Publisher.

Keywords: Analysis, financial state, profitability, equity, business activity, financial stability



1. Introduction

The oil industry is important for the economy of Russia and Iraq, as it is the basis for the formation of the country's budget.

Over the past six years and the beginning of 2020, with the advent of the coronavirus, the Russian and Iraqi oil and the gas market had to face serious difficulties due to falling oil prices, as a result of which the financial stability of this sector and profitability decreased. In general, all this negatively affected the economy of the country as a whole, a decrease in competitiveness.

It is no secret that the financial condition of any enterprise reflects its ability to finance and activities, including the ability to pay with creditors, as well as investment attractiveness.

To improve the efficiency of the enterprise, a financial analysis is carried out, during which the degree of financial stability, the level of profitability and solvency, the valuation of assets and liabilities are revealed.

Based on the results obtained, it is possible to give forecasts and recommendations, the ways to improve the financial status of the enterprise, make managerial decisions regarding costs, volume and structure of product sales.

2. Analysis of the financial status of oil production enterprises

Analysis of the financial status of oil production enterprises is carried out earlier, but for individual oil companies based on the general methodology for analysing the financial status. Consider the methodology of a comprehensive analysis of the financial status specifically for the oil company.

To begin with, we define the main activities of oil production enterprises: wholesale and retail sale of petroleum products, provision of services for the reception, storage of petroleum products, investment activities.

Then, a comparative analysis of the main financial indicators of the enterprise for the last two years is carried out.

- Sales volume of petroleum products (wholesale, retail);
- The volume of services for reception and warehouse operations (if available);
- The volume grosses revenue (revenue excluding taxes and purchase value), including wholesale and retail sales, as well as other revenue (if available);
- Losses from other sales;
- Costs;
- Profit from sales;
- Other income;
- Percentage to be paid;
- Profit before tax;
- Net profit;
- The volume of revenue;
- Accounts payable;

- The volume of investments by sources of financing (rent payments, depreciation at the expense of profit, at the expense of borrowed funds);
- The average number of employees;
- Salary fund.

As a result, we get the percentage growth (decrease) in the main financial indicators.

We analyse for which items there has been an increase in costs and therefore. For example, labour costs increased due to an increase in wages or an increase in the average number of employees, and the amount of depreciation increase due to the purchase of new equipment. We analyse the volume of investments, where and in what volumes, the sources of financing: rental payments, depreciation, at the expense of profit, at the expense of borrow funds.

We determine how the company work compare to the previous year, which affect a positive or negative result.

Table 1. Key indicators of the General assessment of the financial status of oil production enterprise

Name of financial ratio	Calculation formula
Profitability assessment of the activities	
Profitability by net profit	Net Profit: Revenue · 100
Profitability of operating activities	Sales Profit: Revenue
Profitability by gross profit	Gross profit: Revenue
Assessment of business activity and assessment of the effectiveness of enterprise management	
Accounts payable turnover	(AP at the beginning of the period + AP at the end of the period): 2: Cost of goods sold for the period · 360 days.
Inventory turnover	Inventory at the beginning of the period + Inventory at the end of the period): 2: Cost of products sold for the period * 360 days.
Accounts receivable turnover	(AR at the beginning of the period + AR at the end of the period): 2: Revenue for the period · 360 days.
Profitability on equity	Net Profit: Capital
Profitability on investment	Profit before tax: Medium long-term capital
Liquidity assessment	
Absolute liquidity ratio	Cash and cash equivalents: (AP + Short-term funds + Other short-term liabilities)
Current liquidity ratio	(AR + Short-term financial investments + Cash): (AP + Short-term funds + Other short-term liabilities)
Cover ratio	(N-CA + CA): (AP + Short-term funds + Other short-term liabilities)
Total coverage ratio	(CA - Expenses future periods): (AP + Short-term funds + Other short-term liabilities)
Solvency analysis	
Total solvency ratio	(A1 + A2 + A3 + A4): (P1 + P2 + P3 + P4)
Solvency on current liabilities	Current liabilities: Average monthly revenue: 12 months
Financial stability analysis	
The ratio of autonomy (independence)	Own funds (Capital and reserves + revenue of the future periods): Property of enterprise (balance currency)
The ratio of mobile and immobilized assets	(Inventories + Cash and cash equivalents): N-CA
The ratio of manoeuvrability of own working capital (ratio manoeuvrability equity)	(Own funds + Long-term borrowed funds - N-CA): (Own funds + Long-term credits + Long-term loans)
Ratio of working capital security with own sources of financing	(Own funds + Long-term credits + Long-term loans): Inventory and costs
the ratio long-term solvency	(Long-term credits + Long-term loans): (Own funds + Long-term credits)
Notes:	
A1 – the most liquid assets (cash and short-term financial investments);	
A2 – quick-selling assets (accounts receivable);	
A3 – slow-selling assets (current assets other than cash, corporate venture fund, and AR);	
A4 – hard-to-sell assets (N-CA);	
P1 - the most urgent obligations (AP);	
P2 - short-term liabilities (borrowed funds, reserves for future expenses and payments (estimated liabilities), other short-term liabilities);	
P3 - long-term liabilities;	
P4 - own funds (Gerashchenko, 2016).	

To determine the financial situation, the data of the balance sheet, the Statement of financial results are used.

Using the analysis of financial statements, the real state of affairs at the enterprise is assessed, conclusions are made about the work of managers, the correctness of taxation, investment attractiveness and credit for a company ability, the appropriateness of attracting additional borrowed funds for development and the terms of their return (Savitskaya, 2015; Selezneva, 2014). For analysis, we select key indicators for assessing the financial status as shown in Table 1, the most significant for oil companies that evaluate solvency, profitability, liquidity, business activity, financial stability.

3. Profitability assessment

If the company is state-owned, then it is advisable to consider profitability by the main type of activity, not taking into account the social orientation, state activity, charity activity.

A comparative analysis of profitability for the operating activities of the enterprise for the last two years is carried out. (comparison of recent indicators with indicators of the previous period): Profit from sales: Revenue • 100.

Further, the gross profit margin is analysed: Gross profit: Revenue • 100. Growth can occur for several reasons:

- the enterprise has become more efficiently manage as a whole;
- cheaper raw materials;
- production costs increase slightly, and the product itself (product) is much larger.

According to the annual reporting data, we determine: by how many percent the revenue and cost indicators have change and for what reasons (wage growth, changes in oil and petroleum product prices).

Thus, it is advisable to analyse profitability indicators by net profit, by gross profit and profit from sales (from the main activity).

If profitability indicators tend to decrease, then we can say that the company has begun to manage sales costs less efficiently.

4. Indicators of business activity and efficiency of asset and working capital management

A comparative analysis of the turnover of accounts receivable and accounts payable, as well as the company's inventory for the past two years is carried out. An increase in the turnover of accounts receivable and a decrease in accounts payable indicates the effectiveness of working capital management and Vice versa.

Then a comparative analysis of receivables and payables is required. For the last two years, we compared the indicators of accounts receivable, accounts payable, gross profit, and calculate the percentage of accounts payable gross profit.

Next, we calculate the return on equity, which shows what income the managing managers receive on the capital invested by the shareholders and due to which they bring income to the shareholders. To do this, we calculate the ratio of net profit to equity.

Return on equity helps to understand, bring profit growth is increased in the profitability of the enterprise. This will never happen unless large investments have been made. If the profitability of the

business has been decreased, this means that investments have not yet brought the expected increase in profit (Kamenitser, 2010; Sheremet & Sayfulin, 2013).

Note that return on investment helps to evaluate investment performance.

5. Liquidity indicators

Below is a comparative analysis of liquidity indicators over the past two years. The benchmark values of liquidity indicators allow us to draw conclusions about the entity ability to meet its short- and long-term obligation as shown in Table 2.

Table 2. Standard values of liquidity ratios

Indicators	Normative value
Absolute liquidity ratio	> 0.2-0.5
Current liquidity ratio	≥ 2
Cover ratio	> 1.5-2.5
Total coverage ratio	> 1.5-2.5

6. Solvency analysis

A comparative analysis of solvency over the past two years. The ratio of total solvency helps to assess the level of financial stability of the enterprise. Its value determines the ability of an enterprise to cover all short-term and long-term liabilities at the expense of its assets.

Solvency on current liabilities shows how many months it will take for the company to calculate all short-term liabilities. The standard value for this indicator is <3 months.

For oil production enterprises, as subjects of natural monopolies, the recommend value of this indicator is < 6 months, in this case, the company is considered solvent (Kovalev, 2012; Savchuk, 2002).

7. Financial stability indicators

Next, we carry out a comparative analysis of the financial stability of the company over the past two years. There are A number of indicators based on which we can draw conclusions about the financial stability of the enterprise:

Ra - the ratio of autonomy (independence), shows the independence of the enterprise from creditors (the higher the value of the indicator, the more independent the company is), the recommended value of this indicator is ≥ 0.5 ;

Rm/i - the ratio of mobile and immobilized assets, shows how much working capital is account for by N-CA (a value of more than 1 indicates the predominance of current assets in the company, less than 1 - non-current assets);

Rm - the ratio of manoeuvrability of own working capital (ratio manoeuvrability equity), shows the share of equity invest in working capital (a negative indicator indicates low financial stability), the recommend value of this indicator is ≥ 0.5 ;

Rc - the ratio of working capital security with own sources of financing, shows the availability of working capital necessary for financial stability, and also what part of the working capital is finance from

own funds (the closer the value is to 1, the more stable is the financial position of the organization, which means the organization provides current assets entirely at its own expense) , the recommend value of this indicator is $\geq 0.6-0.8$;

RIs - the ratio long-term solvency, allows you to determine the risk of bankruptcy (the lower this ratio, the more independency the company is from borrowed funds).

8. Financial security analysis (A brief analysis of the financial condition of the oil industry in Russia)

Next, a comparative analysis of the financial security indicators of the enterprise for the last two years is carried out: capital and reserves, receivables and payables, debt on loans and borrowings receive (Global Report, 2014).

As for the indicator Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA), which reveals the company's financial results, we note that the data obtained with its help cannot always be called correct, since it sometimes gives a distorted idea of the profitability of the business.

The indicator EBITDA characterizes the company's ability to repay its debts. The formula for its calculation according to the accounting (financial) statements:

$$EBITDA = \text{Net Income} + \text{Interest} + \text{Taxes} + \text{Depreciation} + \text{Amortization}$$
 (Corporate Finance Institute (CFI), 2017).

9. Rating assessment of the financial status of oil production enterprise

To do this, we will distribute financial ratios by reliability classes: the first class is the best indicator, the second is average, the third is the worst as shown in Table 3.

Next, we assign 3 points to the first reliability class, 2 points to the second, and 1 point to the third. By calculating the points, it is possible to determine the level of financial sustainability of the company's integrity: absolute financial stability, normal financial stability, unsatisfactory financial status.

Table 3. Indicators of the rating assessment of the financial status of oil production enterprise with standard values

	Name of financial ratio	Reliability Class Values		
		1	2	3
1	Profitability by net profit	1.2-1.0	1.0	< 1.0
2	Profitability of operating activities	1.15-1.14	1.14-1.12	< 1.12
3	Profitability by gross profit	≥ 1.5	1.5-1.3	< 1.3
4	Profitability on equity	1.19-1.15	1.15-1.14	< 1.14
5	Profitability on investment	≥ 2.02	1.0	< 1.0
6	Absolute liquidity ratio	> 0.5	0.2-0.4	< 0.1
7	Current liquidity ratio	≥ 2	1.9	< 1.9
8	Cover ratio	> 2.5	1.5-2.4	< 1.5
9	Total coverage ratio	> 2.5-1.5	2.4-1.5	< 1.5
10	Total solvency ratio	> 2	1.9	< 1.9
11	Solvency on current liabilities	> 7 months	7 months	<7 months
12	The ratio of autonomy (independence)	≥ 0.5	0.4	< 0.4

13	The ratio of manoeuvrability of own working capital (ratio manoeuvrability equity)	≥ 0.5	0.5-0.3	< 0.3
14	Ratio of working capital security with own sources of financing	1	$\geq 0.8-0.6$	< 0.6
15	Accounts receivable turnover	5.6-5.0	4.99-3.0	< 3.0
16	Accounts payable turnover	12.9-8.0	7.99-4.6	< 4.6
17	Inventory turnover	9.0-8.4	8.3-7.0	< 7.0

Here are the rating groups that characterize the degree of stability of the financial status of oil production enterprise as shown in Table 4.

Table 4. Rating groups characterizing the degree of financial stability of oil producing enterprises

The rating group	Number of points
Absolute financial stability	51
Normal financial stability	34–50
unsatisfactory financial condition	17–33

Note that there are indicators that do not have normative values, since for the most part they are usually evaluated in comparison with the previous period. These include:

- turnover of accounts payable;
- inventory turnover;
- the turnover of receivables.

Nevertheless, for oil companies, we developed standards for them in the rating table for them based on the financial indicators of large oil companies.

The methodology for assessing the financial status of an oil production company helps to assess the level of its financial stability. If financial stability is unsatisfactory, recommendations should be developed and proposed to improve the required indicators. Their forecast values are calculated. Then real indicators are subtracting from the forecast data and recommendations are adopted to improve the indicators that require adjustments.

10. The procedure of forecasting the financial condition

For analysis, the most important financial indicators for oil production enterprises are selected which fully reflect the enterprise's competitiveness, level of profitability, liquidity, financial stability, and business activity. The procedure itself boils down to the following:

1. Initial information about the state of the enterprise and preparation of planning decisions, the following data are required:

- The initial state of assets and liabilities, data of financial statements;
- planning sales volume and states for the sale of products (marketing service);
- planning investments and disinvestments in non-current assets;
- projected end-of-period inventory, work-in-progress balances, accounts receivable, and other current assets;
- decisions on changes in the authorized capital and payment of dividends;

-decisions on financing the activities of the enterprise for the future period (for short-term and long-term loans, payables, arrears of wages and insurance contributions to extra-budgetary funds).

2. Constructing the source information. It is necessary to write the obtaining information in tables or other forms.

3. Creating a financial model of the enterprise. Based on the data written in the tables, the financial model of the enterprise and forecast data on income and expenses, assets and liabilities, receipts and payments are created.

4. Calculation based on the obtained financial model of forecast financial ratios (Kudinov, 2016).

References

- Gerashchenko, O. V. (2016). *Analysis and diagnostics of financial and economic activity of the enterprise*. AUP.Ru. <http://www.aup.ru/books/m67/8.htm> (accessed: 04.03.2016).
- Global Report. (2014). *A brief analysis of the financial condition of the oil industry in Russia*. http://grmonitor.ru/oil_russia_brief
- Corporate Finance Institute® (CFI). (2017). *What is EBITDA – Formula, Definition and Explanation*. <https://corporatefinanceinstitute.com/resources/knowledge/finance/what-is-ebitda>
- Kamenitser, S. E. (2010). *Organization, planning and management of industrial enterprises*. M.: Science and Education.
- Kovalev, V. V. (2012). *The financial analysis*. Finance and Statistics.
- Kudinov, A. (2016). Forecasting of the Financial Standing of Enterprise and the Results of Industrial and Commercial Enterprises. https://iteam.ru/publications/finances/section_11/article_1275
- Savchuk, V. P. (2002). Financial analysis of the enterprise. *Cfin.ru*. <https://www.cfin.ru/finanalysis/reports/savchuk-05.shtml> (date of access: 03/04/2020).
- Savitskaya, G. V. (2015). *Analysis of economic activity of the enterprise*. New Edition LLC.
- Selezneva, N. N. (2014). *Financial analysis. Financial Management: textbook for universities*. UNITY-DANA.
- Sheremet, A. D., & Sayfulin, R. S. (2013). *Methods of financial analysis*. INFRA-M.