

Gezha Alina Vladimirovna

student

Scientific adviser

J.S. Tsertseil

Candidate of Economic Sciences,

Associate Professor

Graduate School of Finance

Plekhanov Russian University of Economics

Moscow

POSSIBILITIES TO APPLY COMPARATIVE APPROACH TO VALUATION FOR RUSSIAN COMPANIES

Abstract: *this article considers the problems of applying the comparative approach to the valuation of Russian companies. The methods of comparative approach to business valuation are studied. PJSC Acron value by the method of companies – analogues is calculated. It is concluded that the method of companies – analogues with multipliers is the most applicable for Russian companies and whole market.*

Keywords: *company value, comparative approach, appraisal activities, capital market method, transaction method, industry-averaged multiples, companies – analogues, multipliers.*

Гежа Алина Владимировна

студентка

Научный руководитель

Церцейл Юлия Сергеевна

канд. экон. наук, доцент

ФГБОУ ВО «Российский экономический

университет им. Г.В. Плеханова»

г. Москва

DOI 10.31483/r-109448

ВОЗМОЖНОСТИ ПРИМЕНЕНИЯ СРАВНИТЕЛЬНОГО ПОДХОДА В ОЦЕНКЕ СТОИМОСТИ РОССИЙСКИХ КОМПАНИЙ

Аннотация: в статье представлены проблемы применения сравнительного подхода в оценке стоимости российских компаний. Автором изучены и представлены методы сравнительного подхода в оценке стоимости, рассчитана стоимость ПАО «Акрон» на основе метода компаний-аналогов. Использование мультипликаторов в оценке стоимости компании представлено как наиболее приемлемый метод в оценке стоимости публичной компании.

Ключевые слова: стоимость компании, сравнительный подход, оценочная деятельность, метод рынка капитала, среднеотраслевые мультипликаторы, компании-аналоги.

Assessing the value of a company is a significant tool in company management. It is an important tool for investors, financial analysts and entrepreneurs as it helps them assess potential return on investment, company performance and make informed decisions on mergers, acquisitions and divestitures.

The goal of company valuation is to estimate the economic value of a business based on various factors such as its financial performance, market size, growth prospects, competitive position, and risk profile.

Definition of the concept of company value by Federal Law №135 «On Appraisal Activities» is the following: «the most probable price at which a given valuation object can be alienated on the open market under competitive conditions, when the parties to the transaction act reasonably, having all necessary information, and the value of the transaction price is not affected by any extraordinary circumstances» [1]. Company valuation or business valuation is the process of determining its most likely price. From the legislative point of view «business valuation» term is defined in Article 3 of the Federal Law «On Valuation Activities». Appraisal activity is defined as «the activity of appraisal subjects aimed at establishing market, cadastral, liquidation, investment or other value stipulated by federal appraisal standards with respect to appraisal objects».

Appraisal activity is aimed at improvement of the efficiency of the current management system of the enterprise, definition of fair prices of shares and bonds, making informed investment decisions, determining of creditworthiness of the company and in some other cases when company valuation can be a significant instrument for important management decisions.

The valuation of a company is carried out using various methods, including cost, profit and comparative methods. Each approach is based on an assumption about how markets generally work. Each of these approaches assumes that markets make mistakes [6]. After all, if it is assumed that markets never make mistakes, then there would be no point in valuation activities in public companies. The company's market price would be a better estimate of the company's value. However, all approaches make different hypotheses about how the market goes wrong and how those mistakes are corrected.

In discounted cash flow valuation, the value of the property is the actual value of the expected cash flow in the property. This approach consists of three components: cash flows, the discount rate, which reflects the risk in this cash flow, and the resource of the property that is evaluated.

When using the comparative approach, the value indicator is obtained by comparing an asset with identical or comparable (i.e. similar) assets for which information on their price is available. Two methods are distinguished in the comparative approach. The transaction method is based on the prices of blocks of shares of similar enterprises that have been purchased or sold. The method of transactions and market quotations provides for the application of a multiplier to determine the value of a particular company. These methods assume that the companies being compared are correctly valued by the market. In this case, multiples are financial derivatives that allow to evaluate a company's business and compare it to its competitors.

To obtain the cost of equity, the value requires adjustments for non-operating assets and liabilities. For this purpose, the value of debt is subtracted, cash and short-term financial investments are added [2]. The resulting value of 100% equity is adjusted for the estimated share of the company and for discounts for lack of control and liquidity using the following formula (1.1) [9]:

$$PN = P100 \times (1 - DLOC\%) \times (1 - DLOM\%) \times N \quad (1.1)$$

PN – Object of valuation (value of N% of the share of equity capital of the company);

P100 – value of 100% share of equity capital of the company;

DLOC – discount for non-controlling character of the assessed share of the company;

DLOM – discount for insufficient liquidity at sale of the assessed share of the company.

The market quotation method is based on the prices of shares of similar companies traded on stock markets.

In calculating the liquidity adjustment, the valuation officer is guided by a range of 25–30%, reflecting an average discount to the value of private companies compared to public companies actively traded on the market. To apply an adjustment for differences in the level of control, the valuation officer analyzes the degree of control associated with the subject of the valuation and peers.

It is common business practice to average a control premium of 30%. Thus, a matrix of adjustments of peer companies' multiples depending on the difference in the level of control can be drawn up.

The cost approach provides a measure of value using the economic principle that a buyer will not pay more for an asset than it would cost to obtain an asset of equal utility. To calculate the value of a business using the net worth method, the market value of all of the company's assets and liabilities is estimated. In general, it turns out that the market value of the assets minus the market value of the liabilities of the company equals the market value of the assets. The market value of the company's liabilities equals the market valuation of equity [5].

The use of methods for assessing the value of a company, namely a combination of income and comparative approaches with methods of reporting analysis is necessary in the following cases:

- management of the value of fixed assets and intangible assets;

- management of receivables and payables;
- inventory management;
- comparative assessment of the market and assets;
- business planning techniques;
- personnel management and motivation.

To analyze the applicability of the comparative method for the valuation of Russian companies, the value of the Russian company PJSC Acron will be assessed. It is a group of companies of vertically integrated producers of mineral fertilizers in Russia and in the world, which produces and sells fertilizers. Current financial results of PJSC Acron are worse than the average results of half of most comparable companies in the Russian industry. Nevertheless, there was an enhancement in the organization's financial condition in the year 2022.

The capital market method requires data on public joint stock companies in the industry under consideration whose securities are listed on the stock exchange. The analysis of shares listed on the Moscow Exchange showed a limited number of participants. In this regard, stock exchanges of developed countries were taken into account to estimate company capitalization, as not all Russian retailers list their securities on local trading floors.

For the transaction method, the data source is the M&A market in Russia [7]. However, information on such transactions does not provide any additional data, except for the fact of the transaction and its date.

Another method of the comparative approach is the comparison of the target company with the proposed industry-averaged multiples.

Thus, to assess the value of a company using the comparative method, it is necessary to select similar companies operating in the fertilizer sector and similar in scale of production. They should have public financial statements and be traded on the stock exchange.

It is also important to take into account comparability criteria and assess the following factors: the level of diversification of production, market position, and the nature of competition. The legislation does not establish the minimum number of

analogs. However, referring to the tacit agreement of the appraisal community and consumers of the appraisal on the necessity and sufficiency of five object-analogues for obtaining a «reliable» result of the appraisal of the market value of the object within the framework of the comparative approach, five companies-analogues have been chosen. Among the Russian companies one company that fits these parameters has been selected – PJSC Phosagro. For completeness of company value calculations by the comparative method four foreign companies from this sector have been selected: PJCS Nutrien, PJSC Mosaic, PJSC SF Industries and PJSC Yara International SA.

For the first stage of calculations of the company's value by the comparative method the main financial ratios of PJSC Acron have been derived. They are presented in the table below.

Table 2.4

Key financial metrics of PJSC Acron, bill. rub

	2020	2021	2022	2023F
EV/EBITDA	18	6,4	4,8	6,4
P/E	0	9	6,7	9,6
Revenue	120	112	147	132
EBITDA	38	58	144	107
Adjusted net income	8	75	100	70
Capex	-17	-17	-27	-40
FCF	9	54	68	34
Net debt	102	74	13	-21
Net debt/EBITDA	2,7	0,7	0,1	-0,2
Change in revenue	7%	77%	32%	-17%
EBITDA margin	32%	51%	52%	46%
FCF yield	1%	8%	10%	5%
Dividend yield	9%	10%	0%	0%

Source: compiled by the author on basis of consolidated financial statements in accordance with IFRS 2020–2022 [4]

Since there are still differences between the peer companies, the calculation of value is done through multiples. The most common ones are [3]:

- EV/profit;
- EV/dividends;
- EV/EBITDA;

- P/E;
- EV/net asset value.

Let's look at the above multiples individually and identify the disadvantages specific to each, as well as common problems associated with the choice of multiples.

The enterprise value/profit multiplier faces the fact that a company's profit often fluctuates greatly from year to year. In addition, it is common in Russian conditions to extract profits from the company by «black» means, which leads to significant discrepancies between the real profit of the company owner and the income statement data. These circumstances may limit the application of this multiplier.

The enterprise value /dividends multiplier is applicable only to companies that pay dividends. In addition, the company value calculated using this multiplier depends on the ratio of dividend payments to net income set by the company itself, and often differs significantly even among companies belonging to the same industry and of comparable size. All these factors significantly limit the possibilities of using this multiplier.

The P/E multiple shows the price to earnings ratio. However, it is incorrect to compare companies from different industries and in different life phases by P/E.

The EV/EBITDA multiple shows the market valuation of a unit of profit. It is used to compare companies that operate under different accounting and taxation systems. It is similar to P/E, but only instead of market capitalization the real market price of the company is used. And instead of net profit, a more reliable EBITDA value is used.

The multiple EV /net asset is more often implemented for companies where asset value is more significant, and less suited for those where returns are more important. Moreover, companies where net asset value is difficult to determine the multiplier can be difficult to apply to. This is often applied for companies where intangible assets play a major role, such as high-tech companies, internet businesses and others.

Since the companies operate in the markets of different countries, but are at the same stage of development, 2 multiples have been chosen: EV/EBITDA, P/E. The data are presented in the table. Each of the multiples will be given an individual weight [8]. The weights were chosen based on the analysis of the spread of market coefficients of

the companies, based on the data of which one or another multiplier is calculated: the smaller the spread of coefficients, the greater the weight of the multiplier, and the correlation of the value of multipliers with the financial results of the companies.

Table 2.5

PJSC Acron valuation through analogues method

		Phosagro	Nutrien	Mosaic	CF Industries	Yara International SA	Median	Coefficient weight
Price, \$/share		90	79,2	49,7	84,7	461	152,92	
Market capitalization, \$ mln		11 682	40 115	16 918	16 623	11 372	19342	
EV/EBITDA	2021	3,3	4,2	3,21	3,3	3,1	3,422	0,7
	2022	5,2	5,1	4,23	4,5	4,3	4,666	
P/E	2021	5,3	5,7	4,3	4,9	4,1	4,86	0,2
	2022	8,9	5,4	5,8	6,4	6,7	6,64	
Dividend yield (12 months), %		12%	3%	1%	2%	10%	6%	0,1

Source: compiled by the author on basis of consolidated financial statements in accordance with IFRS 2020–2022 [4]

Acron's P/E and EV/EBITDA ratios place it at a premium to both foreign peers and PhosAgro. At the same time, Acron outperforms its peers in terms of EBITDA margin (45–50%), but temporarily does not pay dividends.

PJSC Acron's value = RUB $4.7 \cdot 144 \cdot 0.7 + 6.64 \cdot 147 \cdot 0.2 + 0.06 \cdot 0 \cdot 0.1 =$ RUB 668.976 billion. From the obtained calculation net debt should be deducted. Thus, the value of PJSC Acron by the comparative method is 655.976 billion rubles.

Thus, liquidity, financial stability and solvency factors of PJSC Acron were analyzed. The results of the analysis are on average not much lower than the average market indicators, however for the last 3 years there is a positive dynamics. Also the value of the company was calculated by comparative approach on the basis of the method of companies-analogues. It amounts to RUB 668.976 billion.

All in all, when comparing the comparative approach to the valuation of the company with other methods, important advantage can be identified – taking into account the real interests of investors and market conditions.

However, the applicability of comparative approach methods is limited in the Russian market. The capital market method requires data on public joint stock companies in the industry under consideration whose securities are listed on the stock exchange. The analysis of shares listed on the Moscow Exchange showed a limited number of participants. In this regard, stock exchanges of developed countries were taken into account to estimate company capitalization, as not all Russian retailers list their securities on local trading floors.

For the transaction method, the data source is the M&A market in Russia. However, information on such transactions does not provide any additional data, except for the fact of the transaction and its date.

For method of comparison of the target company with the industry-averaged multiples, the Russian market does not provide sufficiently accurate and objective indicators by industry.

Thus, company valuation by method of companies – analogues with multipliers is the most applicable for Russian companies and whole market.

References

1. Federal Law №135-FZ of 29.07.1998. «On appraisal activity in the Russian Federation» // Collection of Legislation of the Russian Federation. – 1998. №31. – Art. 3813 (as amended and supplemented).
2. Order of the Ministry of Economic Development of Russia from 20.05.2015 №297 «On Approval of the Federal Valuation Standard «General Concepts of Valuation, Approaches and Requirements to Valuation (FSO №1)» // Bulletin of normative acts of federal executive bodies. – 2005. – №28.
3. Abramishvili N.R. Features of the application of the comparative approach to assessing the value of public companies in Russia / *Universum: Economics and Jurisprudence: electronic scientific journal*. – 2019. – №3 (24) [Electronic resource]. –

Access mode: <http://7universum.com/ru/economy/archive/item/2982> (date of circulation: 20.11.2023).

4. Auditor's report of an independent auditor on the accounting (financial) statements of Public Joint Stock Company Acron for 2020, 2021, 2022.

5. Damodaran A. Investment Evaluation. Tools and methods of any assets valuation / A. Damodaran. – M., 2012. – 1316 p.

6. Fateev I.V. Business valuation problems in modern conditions of business value assessment // Theory and practice of modern science. – 2019. – №7 (49) [Electronic resource]. – Access mode: <https://cyberleninka.ru/article/n/otsenka-stoimosti-biznesa-problemy-v-sovremennyh-usloviyah-otsenki-stoimosti-biznesa> (accessed 16.11.2023).

7. Kapranova L.D. Features of the development of the market of mergers and acquisitions in Russia / L.D. Kapranova, E.O. Zazulya // Financial analytics: problems and solutions. – 2020. – №24. – P. 23–28.

8. Semina N.S., Nazarova D.I. Modern methods and software tools of simulation modeling in solving problems of customer service in the banking sector // Proceedings of the VI International Scientific and Practical Conference Economic Education: New Opportunities. – M., 2023. – P. 32–38.

9. Valuation Guide of business valuation department // Russian Consulting Group Althaus. – M., 2023.