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## **FEATURES OF VALUING BUSINESS USING THE METHODS OF THE MARKET APPROACH**

*The article provides an overview of the main approaches used in business valuation, as well as key valuation methods in their composition. The authors made the main emphasis on the use of the market approach and its methods (capital market and industry coefficients) for the purpose of valuation. An appraisal of the value of one of the leaders of domestic retail – Eurotorg LLC was undertaken using a market approach.*

**Keywords:** business valuation, asset-based, market and income approaches of business valuation, capital market method, industry coefficients method, method of transactions, price multipliers

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## **ОСОБЕННОСТИ ОЦЕНКИ СТОИМОСТИ БИЗНЕСА С ИСПОЛЬЗОВАНИЕМ МЕТОДОВ РЫНОЧНОГО ПОДХОДА**

*В статье дается обзор основных подходов, применяемых в оценке бизнеса, а также ключевых методов оценки в их составе. Основной акцент сделан на применение в целях оценки рыночного подхода и основных его методов (рынка капитала и отраслевых коэффициентов). Была предпринята оценка стоимости одного из лидеров отечественного ритейла – ООО «Евроторг» – с использованием рыночного подхода.*

**Ключевые слова:** оценка бизнеса, затратный, рыночный и доходный подходы оценки бизнеса, методы рынка капитала, сделок и отраслевых коэффициентов, ценовые мультипликаторы

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### **Introduction**

A business valuation, also known as a company valuation, is the process of determining the economic value of a business. During the valuation process, all areas of a business are analysed to determine its whole value or value of its divisions or units [1].

A company valuation can be used to determine the fair value of a business for a variety of reasons, including sale value, establishing partner ownership and taxation. Owners will often turn to professional business evaluators for an objective estimate of the value of the business.

### **Results and their discussion**

The topic of business valuation and essence of main valuation approaches are frequently discussed in corporate finance environment. International and Belarussian Valuation Standards distinguish between such core valuation approaches as *the income approach, the market approach and the asset-based approach*.

In this article main emphasis will be made on usage of market approach for the purposes of business valuation so it will be useful to remind main distinctive features of this approach as well as features of main methods within it.

*The market approach* is a set of methods for estimating the value of the appraised company, based on comparing the company under valuation with companies that are analogues of the company valued and for which information on prices is available.

In a market approach, it is necessary to distinguish between three methods of valuation:

1. *Capital market method.*

The capital market method is based on the use of similar companies from the stock market. The advantage of this method is that it uses up-to-date information. Importantly, this method allows you to find prices for comparable companies on almost any day due to the fact that securities are traded almost every day.

2. *Method of transactions.*

The transaction method is a special case of the capital market method. The main difference between the method and the capital market method is that this method determines the level of the value of a controlling stake, since the company's counterparts are selected from the corporate control market.

3. *The method of industry coefficients.*

The method of industry coefficients is based on the recommended ratios between the price and certain financial indicators. The calculation of industry coefficients is based on statistical data for a long period. Due to the lack of sufficient data, this method is practically not used in the Republic of Belarus [5].

The essence of the market approach to determining the value of the company is as follows. A business is selected that is similar to the company being valued and has recently been sold. Then the ratio between the market price of the sale of an analogue enterprise and any of its financial indicators is calculated. This ratio is called the price multiplier. To obtain the market value of equity, it is necessary to multiply a similar financial indicator of the company being valued by the estimated value of the price multiplier.

The main stages of company valuation using the capital market method as main method within market approach can be disclosed in the following way:

1. Gathering the necessary information.
2. Comparison of the list of similar enterprises.
3. The financial analysis.
4. Calculation of price multipliers.
5. The choice of the value of the multiplier, which is appropriate to apply to the company being valued.
6. Determination of the final value of the cost by the method weighting intermediate results.
7. Making final adjustments.

For explanatory purposes we try to perform the valuation of one of the leaders of our national retail segment – LLC Eurotorg (company under research). For such valuation procedure two methods (capital market and industry coefficients) of market approach will be used.

**1. Valuing company under research using Capital Market method**

According to this method, the value of the company is determined by analogy with the market value of similar enterprises listed on the stock market and for which relatively stable ratios have already identified characterized by the corresponding multipliers.

In Belarus large retail chains provide about 52 % of overall retail food turnover. The main participants of the retail market of Belarus are as follows: LLC Eurotorg, CJS Dobronom, LLC Santa Retail, LLC Libertik, LLC Vitalyur, CJS Unifood, LLC Tabak-Invest, LLC GreenRoznica, foreign unitary production and commercial enterprise BelWillesden, municipal trade unitary enterprise Radzivillovsky, LLC ProstoreRetail [3].

One of the main problems faced when it comes to the choice of company analogue is the fact that there is low level of development of stock market and as the result not a great variety of retail chains to choose from. The relatively low level of development of the Belarusian stock market and, as a consequence, a small number of companies quoted on the stock exchange, make it difficult to choose a company-analogue.

There has been an express analysis performed in order to find analogue companies for LLC Eurotorg with a comparison of total assets and equity of retail companies listed on stock exchanges, a narrow list of potential analogue retail chains was obtained:

– *LLC Lenta (Russia)* – Lenta is a Russian hypermarket chain. The company is registered on Oktyabrsky Island in Kaliningrad. The headquarters is located in St. Petersburg. The Lenta company was founded by Russian businessman Oleg Zhrebtsov on October 25, 1993 in St. Petersburg. As of July 2019, the distribution network includes 246 hypermarkets in 88 Russian cities. Since 2013, the company has been opening stores also in the format of a supermarket. As of July 2019, there are 132 Lenta supermarkets in various regions of Russia.

– *OJSC Pyaterochka (Russia)* – Pyaterochka is a Russian chain of grocery stores «near the house» as part of the X5 Group. The first retail chain store opened in 1998 in St. Petersburg. In 2001, she entered the Moscow market. In 2002, the network began to develop a franchise program. Right now the brand unites more than 16.7 thousand stores served by 31 distribution centers.

– *OJSC Magnit (Russia)* – Magnit is one of the leading food retail chains in Russia, the leader in terms of the number of stores and the their location.

The company is present in about 4,000 locations, and almost 16 million people visit the company's stores every day. Magnit operates in a multi-format model that includes convenience stores, supermarkets, pharmacies and grocery stores. As of June 30, 2022, the company had 26,731 outlets in 67 regions of Russia. More than 63 million people are members of the network's cross-format loyalty program.

Magnit was founded in 1994 in the south of Russia in Krasnodar as a small regional company. During this time, Magnit has grown into one of the largest Russian companies. The headquarters of the retail network is still located in Krasnodar.

– *LLC Best Price (Russia)* – Fix Price, founded in 2007, is a Russian chain of stores in the «fixed price store» format, managed by Best Price LLC. The network includes more than 5,000 stores operating in more than 1,300 locations in 80 regions of Russia, as well as in Georgia, Kazakhstan, Latvia, Belarus, Uzbekistan and Kyrgyzstan.

The financial information about these companies required for conducting further analysis is given in the Table 1. The currency used is thousands of BYN, converted according to the rate of the National Bank of Republic of Belarus at the date of the financial data availability.

Table 1

**Financial information necessary for conducting the company's valuation  
using market approach for 31.12.2022**

Indicator	LLC Eurotorg	LLC Lenta	OJSC Pyaterochka	OJSC Magnit	LLC Best Price
Assets, in thousands of BYN	2,925,000	13,550,772	50,831,692	47,702,357	3,355,035
Liabilities, in thousands of BYN	2,527,158	9,548,988	47,369,996	39,471,454	3,039,832
Equity, in thousands of BYN	397,842	4,001,784	3,461,696	8,230,903	315,202
Net income, in thousands of BYN	215,837	539,071	1,915,944	2,042,356	844,951
ROA, in %	8.9	4.0	3.8	4.3	25.19
ROE, in %	65.2	13.5	55.3	24.8	268.06
Market capitalization, in thousands of BYN	X	3,847,689	20,945,020	21,924,720	18,235,046

Source: author's developed.

The presented companies, as well as the object of the study, have total assets in the range from 2,925 to 50,831 million BYN, while liabilities from 2,486 to 47,369 million BYN. In terms of total assets and

liabilities value, LLC Best Price can be defined as the closest analogue for LLC Eurotorg. Based on the fact that the aim of every commercial company is to maximise profit and minimise losses from operations, it is important to analyse the generalising indicators of company profitability – profit, loss, return on assets and return on equity ratios. Still, when it comes to net income and return on equity ratio, LLC Best Price has the closest value to LLC Eurotorg, while the closest return on assets ratio can be seen in OJSC Magnit. Based on the financial information obtained, the most commonly used to value companies multipliers Price/Earning (P/E) and Price/Book value (P/B) are calculated in the Table 2.

Table 2

Calculation of multipliers for analogue companies

Name	P/E	P/B
LLC Lenta	7.96	0.94
OJSC Pyaterochka	11.9	–30.5
OJSC Magnit	11.5	8.23
LLC Best Price	21.6	70.2

Source: author's developed.

For further calculations, we will use the multipliers of LLC Best Price, as their indicators were the closest to the ones of LLC Eurotorg. Next the value of the company will be calculated by multiplying the company's net profit and equity by the corresponding values of the multipliers (Table 2):

– For the multiple «Price/Earnings»:

$$215,837 \cdot 21.6 = 4,662,079 \text{ thousand of BYN.}$$

– For the multiple «Price/Book value»:

$$397,842 \cdot 70.2 = 27,928,508 \text{ thousand of BYN.}$$

As the result of finding the mean, the value of LLC Eurotorg is 16,295,294 thousand of BYN. Before stating the final value of the company, some adjustments have to be made.

First will decide on control premium, as that the object of valuation is 100 % of shares of the company, which is going to be 24 % according to statistics agency Mergerstat [4]. A control premium is an amount that a buyer is sometimes willing to pay over current market price of a publicly traded company in order to acquire a controlling share in that company.

Another adjustment that should be made is a discount for low liquidity. According to A. Damodaran, the amount of this discount can vary from 20 to 30 % [5]. It is proposed to set the discount amount at 25 %, taking into account the underdevelopment of the relevant market. The adjustment value of LLC Eurotorg is the following:

$$16,295,294 \cdot (1 + 0.24 - 0.25) = 16,132,341 \text{ thousand of BYN.}$$

As the result of the calculation, we receive 16,132,341 thousand of BYN as value of LLC Eurotorg.

It should be noted that the usage of multipliers, which were calculated for other companies, can lead to not fully accurate results. In addition, the use of coefficients for foreign companies does not allow to fully take into account the existing differences in the development of economic systems, though the development of Russian market is pretty close to that of ours.

## 2. Valuing company under research using Industry coefficients method

According to the method of industry coefficients, the calculation of the value of business is determined by using multipliers averaged over the industry.

The main thing that seems most attractive in the use of multipliers is the simplicity and ease of use. They can be quickly applied to the valuation of firms and assets, and become especially useful when there are a large number of comparable firms trading in the financial markets and the markets value these firms correctly on average. It is more difficult to use market prices to value individual firms that have no analogues in the market, with little or no income and negative profits.

But at the same time, it should be noted that multipliers are easy to manipulate and abuse, especially when peer-to-peer ones are used. Given that no two firms are exactly the same in terms of growth and risk, identifying comparable firms becomes a subjective matter. Therefore, a biased analyst may select a group of comparable firms to validate his biases about the value of a particular firm. Therefore, sectoral coefficients are usually calculated by special analytical organizations on the basis of many years of statistical observations between the price of an enterprise's equity capital and its most important financial indicators [5].

Currently the method is not widely used in the Republic of Belarus, since the search for information by industry is difficult. One of the reasons for the unpopularity of this method can be considered the underdevelopment of the Belarusian stock market, and therefore the collection of the necessary information is often impossible due to its absence.

In our case, we calculate value of LLC Eurotorg using multipliers averaged over the industry. The average value of Price/Earnings multiple for retail stores is 16.06 and for Price/Book value – 3.35. Based on this, the value of LLC Eurotorg is calculated as follows:

– For the multiple «Price/Earnings»:

$$215,837 \cdot 16.06 = 3,466,342 \text{ thousand of BYN.}$$

– For the multiple «Price/Book value»:

$$397,842 \cdot 3.35 = 1,332,770 \text{ thousand of BYN.}$$

Therefore, the mean value of LLC Eurotorg determined by using the average multipliers for retail chains is 2,399,556 thousand of BYN. Next we need to adjust value in accordance with control premium and discount for low liquidity. The result is the following:

$$2,399,556 \cdot (1 + 0.24 - 0.25) = 2,375,560 \text{ thousand of BYN.}$$

As in the case of the capital market method, we note that the objectivity of this assessment may be questioned due to significant discrepancies in the estimates obtained using various multipliers, as well as the lack of an information base for calculating average multipliers by industry.

Finally, we need to calculate the average value, which we received from market approach. It is calculated as:

$$(16,132,341 + 2,375,560) / 2 = 9,253,951 \text{ thousand of BYN.}$$

As the result of using the market-based approach, a wide range of values was obtained. To clarify the result, it is worth putting into practice other approaches to business valuation, since the calculation of a single (average) cost value within the framework of the market-based approach is not entirely correct due to the existing data scatter.

It can be said that the result of applying the methods of a market approach to the assessment of Belarusian companies remains discussive and contradictory.

## Conclusions

As a result of the research conducted in this article, it is possible to draw the several conclusions. First is that business valuation is a complex process that involves the application of one or more approaches. Moreover, the underdevelopment of our country's economy (it is especially to the financial sector) is making the process of business valuation even harder, as we have to find analogous companies in order to calculate different coefficients and ratios. This fact could also result in mistakes and inaccuracies, which could potentially mislead the company's management and/or potential investors.

Second, in modern world there are many approaches of business valuation. Most of the times, they can be grouped into three approaches: asset-based, market and income approaches. In this article market approach have been implemented. Under the market approach, the following methods can be highlighted: capital market, transaction and industry coefficients methods. In case of company's analogues, a choice has been made between several retail chains, such as LLC Lenta, OJSC Pyaterochka, OJSC Magnit, LLC Best Price. The foreign (Russian) companies have been chosen due to the reason low level of

development of stock market and as the result not a great variety of companies to choose from. Depending on the type of business and the purpose of evaluation, one or another method can be used. For more accurate results, it is recommended to use several methods simultaneously.

### References

1. Valuing a Company: Business Valuation Defined with 6 Methods. Available at: <https://www.investopedia.com/terms/b/business-valuation.asp> (accessed 17 April 2023).
2. Market Approach. Available at: <https://www.investopedia.com/terms/m/market-approach.asp> (accessed 19 April 2023).
3. Food retail market in the Republic of Belarus. Available at: <https://aser.by/materialy/rynok-prodovolstvennoj-roznicy-v-belarusi> (accessed 22 April 2023).
4. Control Premium Study. Available at: <https://www.bvresources.com/docs/default-source/sample-reports/control-premium-study-quarterly-report.pdf> (accessed 23 April 2023).
5. Private Company Valuation. Available at: <http://pages.stern.nyu.edu/~adamodar/pdfiles/ovhds/inv2E/PvtFirm.pdf> (accessed 25 April 2023).

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