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COMPARATIVE APPROACH AND RISK FACTORS IN BUSINESS VALUATION OF SHARES IN NON-PUBLIC COMPANIES

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Introduction. This study examines the methodological considerations involved in applying the comparative approach and incorporating risk factors when assessing shares in the capital of non-public companies. The lack of open market information significantly complicates the objective assessment of the value of such companies, particularly in the Bulgarian market.

Aim and tasks. This study aims to derive the value of a share of a non-public company by comparing it with public companies and making necessary adjustments with a discount for size and specific risk.

Results. This study applies a comparative approach to the valuation of companies listed on the Bulgarian capital market based on economic indicators for 2021-2023. The value of a company's share was determined based on financial multiples (IC/RI, IC/EVA, ROE, etc.) and a comparative approach, with adjustments for uncontrollability, liquidity, company size, and specific risks. Based on the calculated multiples, companies with higher profitability and efficiency indicators (ROE, ROA, and ROIC) demonstrated better financial stability and competitiveness. For example, ROE values ranged from 0.09 to 0.84, ROA from -0.013 to 0.28, and ROIC from 0.008 to 0.64, with the best performers showing consistently positive results. In contrast, companies with poor or negative performance across most ratios may face higher risk exposure and ineffective management. This is evidenced by extremely low or negative values for IC/RI (–68.99 to 14.42) and IC/EVA (–1,066.39 to 20.11), reflecting inefficient capital allocation and weak value creation. Negative ROA (–0.012) and low ROIC (0.008 to 0.039) suggest potential operational inefficiencies.

Conclusions. The comparative approach to business valuation enables the estimation of the value of a privately held (closed-type) company by applying appropriate adjustments to the financial data of comparable publicly traded (open-type) companies. This study proposes an algorithm for determining a company's share when considering controlling/non-controlling, the degree of liquidity of a block of shares, size, and specific risk through a comparative valuation approach. Applying such an algorithm in valuation practice is primarily based on the valuer's professional experience. It can be advantageously used when valuing privately held companies.

Keywords: comparative approach, share value, non-public company, business valuation, minority interest.

1. Introduction.

Determining the value of company shares is particularly important in business valuation when considering discounts and premiums. When performing calculations, it is necessary to adjust for the transition from the majority shares to those being valued and when transforming minority shares into those being valued. Global studies on the size of discounts and premiums have been conducted in both developed and emerging markets. The database has been constantly updated. There is no ongoing study (monitoring) on the size of such adjustments in the Bulgarian market. Appraisers usually use tabular data to determine the final market value of various blocks of shares/interest in authorised capital (Drábek, 2022).

This study is devoted to valuing a closed-type or non-public company (part of it) using the comparative approach. A calculation algorithm is applied to adjustments for control or lack of control, liquidity, discount for specific risk, and discount for the effect of the company's size. (Bulgarian Stock Exchange, 2024). The primary normative framework for presenting the calculations and interpreting the results is the Bulgarian Valuation Standards (Chamber of Independent Appraisers in Bulgaria, 2018).

This study aims to derive the value of a private company (or a share thereof) by comparing it with public companies and applying the necessary adjustments. In addition to the indisputable lack of control and insufficient liquidity, it is considered that if there is a significant difference in size, it should be adjusted with a discount on size and specific risk.

2. Literature Review.

The discount for insufficient liquidity quantitatively characterises the degree of liquidity decrease. In most cases, it is defined as the value or percentage by which the value of the evaluated block of shares is reduced. Silber (1991) and Emory et al. (2002) emphasised the liquidity discount, using different approaches to its calculation. There are two components to the composition of the discount: liquidity and information asymmetry (Das et al., 2003).

Challoumis and Eriotis (2024), Grbenic (2022) and Van den Cruijce (2022) emphasised that the liquidity discount for "illiquidity" in the literature is identified with "liquidity discount", "marketability discount", and more broadly private company discount, using different approaches to its calculation. Bajaj et al. (2001) considered two components in the composition of the discount: liquidity and information asymmetry.

Rubin (2007) examined the relationship between a firm's stock liquidity and firm-specific ownership structures such as size, ownership concentration, and corporate governance. Further research indicates that smaller firms and those with limited disclosure practices exhibit higher discounts. This highlights the growing interest in integrating financial and nonfinancial variables into discount valuation models.

The importance of adjusting the value of a share package stems from the fact that liquidity risk is particularly prevalent in the financial market (Pukala, 2021). The value would be overstated if this adjustment were not considered (Iliychovski, 2022). Further research used the Analytical Hierarchy Process (AHP) to determine the level of risk in business valuation (Razali et al., 2022).

Recent studies have highlighted the influence of contextual and structural factors on the size of liquidity discounts. Koeplin et al. (2000) and Officer (2007) showed that the size of the discount may vary depending on the industry, firm size and the nature of the transaction.

Empirical evidence indicates that companies with stronger corporate governance and more transparent reporting practices exhibit lower liquidity discounts (Chen et al., 2009). This reinforces the importance of integrating quantitative and qualitative factors into valuation models when estimating liquidity discounts.

Although considerable research has been conducted on global liquidity issues in non-public companies, there remains a lack of empirical data and transparency in the Bulgarian market. These limitations hinder the accurate estimation of illiquidity's impact on business valuation.

3. Theoretical Framework.

Purchasing a minority stake requires careful consideration of the investment characteristics of the transaction (Iliev et al., 2023). At the same time, the appraiser must consider the investor's motives, as these motives determine specific strategic objectives. The valuation outcomes may vary significantly depending on the underlying intent of the acquisition. The acquisition of a minority stake can serve several purposes: enhancing the performance of the acquirer's own company through strategic partnerships, generating income from dividends, profiting from capital appreciation, or benefiting from the spread between purchase and sale prices.

In the first case, the motive is the preservation and growth of equity by receiving income as dividends and reselling a package higher than the purchase price. Most shares purchased for this purpose do not exceed 10% of the equity share.

In the second case, the goal is to increase activity efficiency by purchasing shares from other companies. In this context, situations should be highlighted when a package of partner companies (suppliers and intermediaries) is acquired, depending on the main activity of the enterprise. Thus, the value of the package may significantly exceed the total value of the shares. The case is similar when a share is acquired from a competitor who has the opportunity to enter a new market (Das et al., 2003).

When acquiring a minority stake to receive secure income in the form of dividends, the starting point should be the criteria outlined by Emory et al. (2002), including:

- The number and frequency of dividend payments.
- The dividend-distribution history.
- The current financial condition of the company being evaluated and its growth potential.
- Public or private companies.
- The legal form of the company.

Another important consideration is whether a minority stake is offered to an owner (previous shareholder) or an entity outside the company. In this case, if the stake is offered to a previous owner, its value should be higher because it is assumed that, with its acquisition, this shareholder may become the owner of a majority stake (i.e. in one case, rights are redistributed, becoming a majority owner; in the other, no rights are distributed (for example, a new owner of a 10% stake)).

In outline, the factors that influence the value of a minority stake can be identified as follows: degree of concentration of equity; dominant owners and their investment motives; rights that have current owners and rights that each owner would have if they acquired the package.

The following forms of capital distribution can be distinguished based on the number of owners and the size of their shareholdings (Table 1).

Table 1. Forms of Capital Distribution.

Form of capital distribution	Description
Dispersion	All issued shares are held by many owners, each owning no more than 2%
Low Concentration	Remaining shares are held by small shareholders, none owning more than 10%
Medium Concentration	Shares held by small and medium shareholders; individual stake ranges from 10–25%
High Concentration	Several shareholders, each owning 25–50%
Ultra-High Concentration	More than 50% of shares concentrated in the hands of a single holder

Source: based on Bulgarian Stock Exchange (2024).

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Grouping this way clarifies which groups of shareholders manage and make management decisions and what opportunities they have to exercise their rights. The following categories are outlined:

– Managers and outsiders, as a rule, represent the interests of large shareholders and ignore the interests of other owners.

– The country has significant opportunities to manage enterprises and control their activities. Small- and medium-sized shareholders can exercise legal rights to manage a company's activities.

– Employees who are minority shareholders in companies with dispersed capital.

The appraiser must analyse the degree of capital concentration and the category of dominant owners, which would allow for identifying potential buyers.

Analysing the redistribution of rights determines the premium amount to the total value of the shares for each potential buyer. When acquiring a minority stake, the owner becomes the majority. A controlling stake allows the owner to influence the management. These stakes include control and blocking packages. Premiums are important when switching packages. The larger the package of shares, the higher the degree of control, and accordingly, the higher the specific value of the assessed share.

The highest premium is when transferring to the controlling stake (50% + 1 share), because the owner receives control over share capital. This possibility is ensured through the right to make the majority of decisions at the shareholders' general meeting, of which the most significant for exercising control over the company is as follows (Fig. 1).

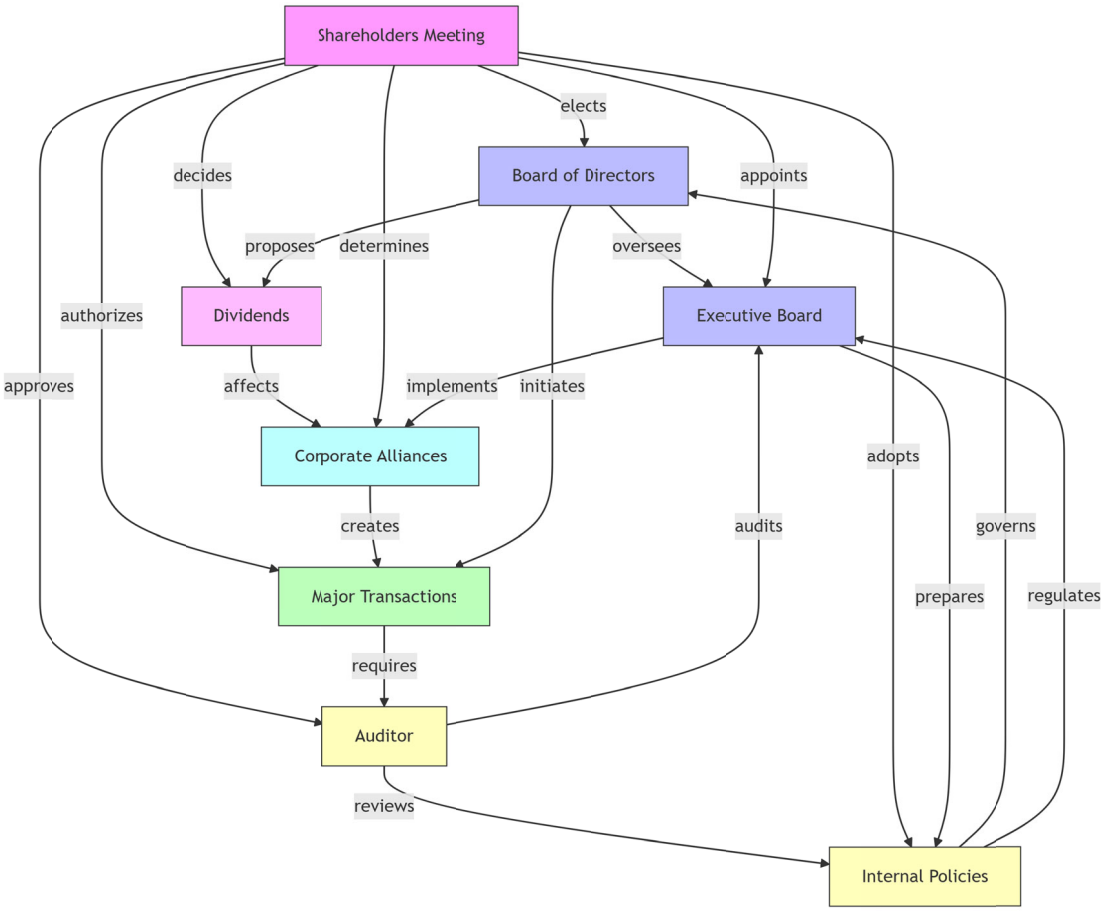

Fig.1. Diagram of Powers and Relationships in the Corporate Governance System.

Moreover, the owner of the controlling stake has the right to:

– Increase the company's capital by raising the nominal value or issuing additional shares if these matters fall within the board of directors' competence under the company's charter.

– Approval of the company's annual reports and financial statements.

– Defining the initiation and conduct of the general meeting of shareholders.

In another case, when the share increases to absolute control (75% + 1 share), the premium amount should be smaller because the owner receives complete control of the company's activities and has the right to make all decisions at the general meeting of shareholders. Decisions requiring at least three-fourths of the votes are related to:

– Amendments to the company's charter.

– Reorganisation of the company.

– The companies winding-up procedure.

– Amount, nominal value, class of shares and and entitlements provided by the shares.

– Reduction of the company's authorised capital by lowering the nominal value of shares, acquiring and cancelling part of the shares, or repaying purchased shares.

– A decision to approve a major property transaction from a price constituting more than 50% of the book value of the company's assets.

The premium amount is lowest when switching to a blocking stake (25% + 1 share), as the owner can block decisions at the general meeting of shareholders that require at least three-quarters of the votes to be adopted and thus influence the company's management.

The control premium reflects the advantages of ownership of the controlling stake in value terms. The owner of the majority stake has the right to a share of the profit created during the operation of the company in the form of a dividend, participation in the management of the property through voting at the general meeting, participation in the management bodies or through the management of the corporate property itself, and transfer of its ownership to third parties.

The basis for the premium is due to the influence of the owner of the controlling interest in the dividend policy of the enterprise, on the opportunity to participate in the management of the enterprise, on the level of managers' remuneration and their privileges, on the choice of a strategy for the development of the enterprise, the decision to issue a new issue of securities, and the decision to sell assets and liquidate the enterprise.

In international practice, the control premium is published in an annual statistical survey of company mergers (Business Valuation Resources, 2024). The control premium over the years ranges from 20 to 30%.

It can be noted that minority shareholders would hardly have the opportunity to exercise significant influence on the company's management. This is why the premiums for switching to a larger minority stake are insignificant, except in cases where it is known that the ultimate goal of buying out minority shares is to switch to a majority stake. Such situations are rare, as stakeholders try to keep this information confidential.

4. Results.

The crisis and looming recession in Europe forced some investors to leave the stock markets due to a sharp decline in the market value of shares and the inability of companies to pay dividends on time and in full.

The liquidity crisis forced shareholders to sell existing shares and significantly reduce the “premiums” associated with redistributing rights and the strategic importance of selling the shares to the buyer. Liquidity is realising the value of a block of shares within a particular time. In this regard, the rapid realisation of the ownership block increases a company's value, while insufficient liquidity decreases it. The more difficult it is to liquidate, the slower it is realised and the lower the assessment obtained.

The appraiser must consider factors influencing liquidity, as these affect the size of the discount. Table 2 presents key predictors and potential impacts. When valuing share blocks, insights from international studies on illiquidity discounts can also be applied.

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Table 2. Factors Affecting the Liquidity of a Block of Shares and the Amount of the Discount.

Factors that increase liquidity and decrease the discount rate	Factors influencing both increases and decreases	Factors reducing liquidity and increasing the discount rate
- Payment of higher dividends; - Free trading of package shares; - Significant volume of trade; - Prospects for securities public offering. - Expected business growth.	- Industry affiliation; - Distribution of property; - Possible deals; - Market competition; - Regulatory changes.	- Low dividends; - Non-payment of dividends; - Limited trading of shares; - Low business prospects; - High debt levels; - Limited access to capital.

On this basis, the following methods for adjusting the value by considering the liquidity discount can be classified (Magnusson & Talbak, 2017; Team CFI, 2025):

– Liquidity discounts for transactions with shares with trading restrictions for 1966-1998 were established. At the end of this period, the discount was approximately 13% (Mercer, 2021). The method assumes that the discount's average values depend on the liquidity degree. That is, the same value would be used to evaluate minority stakes of different companies, which is a major drawback of the method.

– Discount is defined as the difference between the prices established five months before and after the public offering of shares. This method has become widespread thanks to Emory et al. (2000), who, as a result of his research, determined the liquidity discount for new, rapidly developing enterprises accompanied by high risk. They concluded that this should be 54%.

– The discount is determined by the possible advantageous price of selling the asset during the option period and the asset's value after this restriction period (Longstaff, 1995).

– Discount is defined as the difference between the price of shares with restrictions and those without restrictions, but with the same trading methods. Hertzel and Smith (1993) and Wruck (1989) substantiate that the discount within the framework of this model varies from 7.23% to 20.4%.

The model is based on assumed expected cash flows from a minority stake. The liquidity discount is defined as the difference between the asking and bid prices. The model helps to determine the discount for insufficient liquidity of a minority stake based on the return on investment.

It is imperative to consider liquidity discounts when valuing a block of shares. The different approaches used to calculate it determine a wide range of values. The latest research in this direction, Rodríguez-Valencia (2023), found that discounts ranged from 12.3 to 33.3% (15-30). Another important point in valuing shares and applying the Comparative Approach is the need to consider that the discount may also be different when using different multipliers (Rodríguez-Valencia, 2023).

4.1. Model for Estimating Control Block Illiquidity Discount.

When evaluating a large block of shares that provide control over a company, the liquidity factor can be ignored. This is because the controlling investor can recoup his funds in other ways if necessary (Petrova & Todorov, 2023). The discount for the lack of liquidity of a controlling stake can be determined based on the following data.

– The costs of the initial offering and the purchase and sale of the enterprise. Koeplin et al. (2000) amounted to 10-20% of the value of the issued shares (for public companies) and are hypothetical for closed-type companies (what are the funds if shares are issued on the stock market).

– When determining the liquidity discount for a controlling stake, the discount rate for the entire enterprise must be used. As liquidity matures, it should be no less than six months.

Overall, the discount for insufficient liquidity on a controlling stake with an exposure period of 6–12 months typically ranges from 0% to 20%, depending on specific factors and circumstances (Hitchner, 2012).

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In modern developments, problems with valuing blocks of shares have arisen. Mercer (2021) introduced a model for level of value. Three models or levels are traditionally distinguished from the Integrated Theory of Valuation positions. Hitchner (2012) developed this theory and proposed five levels of value.

When evaluating closed-type enterprises, global experience (theory and practice) suggests using information about comparable public companies whose shares are traded on the stock market. An economic agent from the same industry, a competitor with an identical capital structure, was selected as a criterion for comparability. It should even be noted that enterprises are not in negotiations or are taken over.

When valuing a share in a closed company, determining the value requires. In this context, it is necessary to determine the level of control over the company and the degree of liquidity of the evaluated block of shares.

If the part/share of a company is acquired, the appraiser should pay attention to the necessary adjustments (premiums and discounts). Their sizes can be determined using various methods. For example, when deriving the value of a minority block of shares of a closed company, the discount for insufficient liquidity can reach 30-40% (Hitchner, 2012).

In this study, a shortened methodology or algorithm is proposed for calculating the value of the acquired share of a closed-end company. The traditional algorithm for deriving market value is followed when valuing a company. After the general economic and industry analysis is performed, an analysis of the company being valued and selected as an analogue follows.

In 2023, non-universal postal services amounted to 801.6 million BGN, with the largest 764.5 million BGN or 95.37% falling on courier services. Figure 2 shows the trend of increasing revenue in recent years.

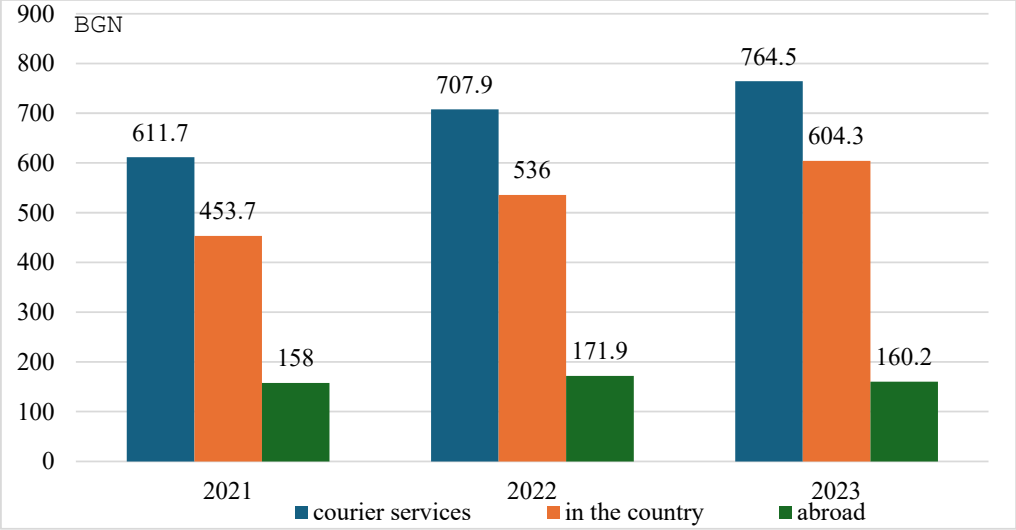

Fig. 2. Revenue from Courier Services in Bulgaria, 2021–2023.

Source: based on Communications Regulation Commission (2025).

The increase in revenue for 2023 compared with 2022 is 8%, and it should be noted that courier services in the country increased by 12.7%, but those from abroad decreased by 6.8%. This can be explained by the removal of COVID-19 restrictions, an increase in inflation in the EU, and an increase in the prices of courier services. According to information from the annual report of the Bulgarian Communications Regulation Commission (2025) by market share, the leading operators in the analysed segment are "Econt Express" 39.9%, "Speedy" JSC 33.8% and "DHL Express Bulgaria Ltd". 7.6%. All others will distribute a market share of 18.7% by 2023. There is a ranking of newspaper capital for courier companies as of the end of 2021, ranked by revenue.

The following companies were selected based on this list: Speedy JSC (3), TNT Bulgaria (5), DHL Express Bulgaria (4), In Time (7), M&BM Express (8), and InOut Trade (16). Econt Express Bulgaria's reports were also analysed due to limited access to Econt Express's complete financial statements. The activities of the selected companies were examined over the period from 2015 to 2021.

The calculated multipliers/coefficients of the companies invested capital/residual income (IC/RI), invested capital/economic value added (IC/EVA), invested capital/cash free flow (IC/CFF), total shareholder return (TSR), return on equity (ROE), return on sales (ROS), return on assets (ROA), revenue efficiency (REF), cost efficiency (CEF), return on invested capital (ROIC) are presented in Table 3.

Table 3. Calculated Multiples and Coefficients for Companies in Bulgaria, 2021.

Operator / Multiplier	FedEx Express	ECONT Express BL	In time	M&BM Express	InOut trade	Speedy	DHL
IC/RI	-68.9921	-18.13	3.5289	-3.56	1.1226	5.3598	14,421
IC/EVA	-243.23	- 1066.39	3.5396	-2,893	1.1040	5,738	20.11
IC/CFF	-1.8205	13.3092	2,373	4.1859	0.2394	4.1859	4.1859
TSR	0.0688	1.64953	0.3050	0.5136	1.2622	0.5057	0.0167
ROE	0.2983	0.0916	0.5352	0.8367	0.6639	0.1829	0.4287
ROS	0.0389	0.0624	0.0414	-0.012	0.1666	3.7452	1.5116
ROA	0.1558	0.0347	0.2177	-0.013	0.2824	0.1029	0.0359
REF	0.9539	0.9323	0.959	1,012	0.836	0.6534	0.967
CEF	1.0482	1.0256	1,041	0.988	1,195	1.5303	1,033
ROIC	0.1532	0.6375	0.352	0.008	0.039	0.1765	0.162

Based on the calculations and application of the proposed algorithm, InOut Trade Ltd. was selected. To estimate the value of a 30% share, Speedy JSC, whose shares are publicly traded, was used as a comparable company. The relevant data are presented in Table 4.

When deriving a company's value, applying at least two approaches and methods is necessary. In this case, the goal is to use opportunities to apply the comparative approach when deriving the value of a closed-type company.

Table 4. Parameters of the Evaluated and Comparable Companies as of 31.12.2021.

	Inout Trade Ltd.	Speedy JSC
Value per share/unit		105 (53,68 euro)
Revenue	8 5 10,000 (4 351 093 euro)	210,450,000 (107 601 376 euro)
Residual income	1,393,992 (712 740 euro)	33,962,000 (16 364 494 euro)
Number of shares/units	1	5,377,619
Enterprise value		716 775 995 366 481 747 euro)

Source: based on Infostock (2023).

Speedy was listed on the Bulgarian Stock Exchange JSC in 2012, and became the first company with public status in the industry. The following algorithm is proposed to account for discounts of uncontrollability and liquidity, company size, and specific risk when applying the Comparative Valuation Approach (Fig. 3). The transaction method for closed-type companies and its application is appropriate when there is information about similar companies and their shares are traded on the stock market.

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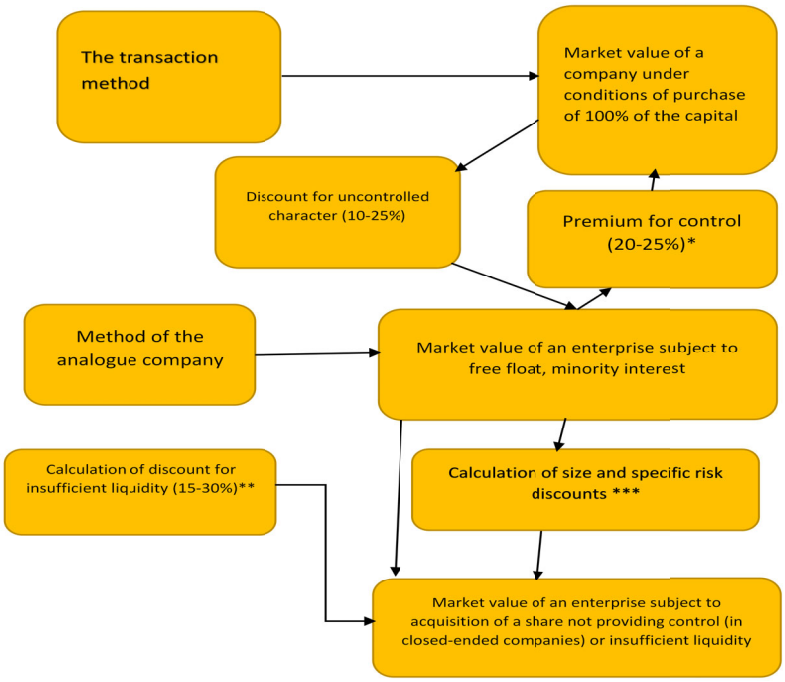

Fig. 3. Valuation Algorithm for Controlling and Non-Controlling Shares: Adjustments for Liquidity, Size, and Risk in the Comparative Approach.
Source: based on Curtin (2025), Rodríguez-Valencia et al. (2023).

Valuation is carried out when a share is acquired that cannot provide control over the enterprise. The sequence can be presented as follows: determining the value of a business; calculation of a proportional share of the assessed package; deducting a discount for lack of control; accounting for a discount for lack of liquidity; measuring discount for size and specific risk; determining the value of the package being evaluated. The following formula can represent this:

$$V_{sh}^{min} = V_k * d * (1-k_k) * (1-k_l) * (1-k_r) * (1-k_{sr}) \quad (1)$$

where: V_{sh}^{min} is the value of a minority stake; k_k is the discount for uncontrollability; k_l is the liquidity discount; k_r is size discount; k_s is specific risk.

Following the algorithm shown in Fig. 3, the value of InOut Trade was derived based on the enterprise value/residual income multiplier BGN 29,399,000 (EUR 15,031,470). Since a significant number of multipliers have been calculated, an average value can be taken for each of them, allowing the valuation of the company to be determined more accurately.

Subsequently, the proportional share is calculated (30% in this case), which amounts to BGN 8,819,865 (EUR 4,509,525).

The following discounts for lack of control and liquidity were determined: in this case, the discount for insufficient control when acquiring a 30% stake is estimated at 20–25%. In this regard, a rate of 20% was assumed.

As is known, the liquidity discount is defined as an amount or percentage by which the value of the enterprise or share is reduced to reflect the insufficient liquidity of a specific asset (Officer, 2007). In the Bulgarian market, it is challenging to find data on the number of transactions involving various blocks of shares in closed-end companies, based on which the value of the discount due to insufficient liquidity can be derived. Several studies have been presented in foreign literature dedicated to determining the average value of this discount. Research has been conducted by consulting companies such as “Deloitte & Touche”, the “Securities and Exchange Commission”, and “Mergerstat”. In this case, the liquidity discount is assumed to be 20.00%.

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The discount related to the specific risk inherent in closed-end companies must be determined. This adjusts the value of the share or company. This is the so-called unsystematic risk specific to a particular company (NACVA, 2025).

Risk assessment (whether for a public or closed company) is based on the use of objective and subjective methods, primarily relying on the professional experience of the assessor (Trugman, 2017). In this study, "specific risk" refers to the unsystematic risk associated with a particular enterprise. According to Reilly (2025) and Janos (2017), this risk is linked to the company's operations and is identified by comparison with similar firms. Butler and Pinkerton (2006) and Porter (2008), also raise the issue of the need to assess this type of risk.

Butler and Pinkerton (2007) proposed an approach to determine a company's unsystematic risk. According to them, it consists of specific risks associated with the size of the enterprise. The following formulas represent this:

$$S_{rk} + R_{rk} = (T\beta - \beta w) * ERP \qquad (2)$$

where: S_{rk} is the specific risk; R_{rk} is the premium associated with the effect of the company's size; Tβ is general investment risk; βw is market beta; *ERP* is the market risk premium.

$$T_\beta = \frac{\beta_w}{p} \qquad (3)$$

where: p is the correlation coefficient of the company and the market.

The study proposes that the calculation of unsystematic risk is based on an integral risk assessment indicator, that is, to consider the difference between the established levels of each company, and this is the discount for specific risk. The summary indicators include the Sharpe Ratio, Modified Sharpe Ratio, Treyner Ratio, Sortino Ratio, Information Ratio, Kalmar Ratio, and Modigliani Ratio (M-2).

In this study, the idea is to calculate a risk premium related to the size of a company, as Speedy is larger than the one being evaluated. When deriving the risk premium related to a company's size, it is necessary to consider several circumstances.

First, a large company often has advantages over small companies because of its relatively more stable business.

Second, they have relatively more straightforward access to financial markets when it is necessary to attract resources. However, small enterprises carry out their activities more efficiently in industries such as trade, catering, utilities, and production without complex technological processes.

The value of the risk premium related to size can be reasonably estimated. It is necessary to consider emerging trends in similar enterprises. The risk premium related to company size is determined using the following formula:

$$S_r = S_{max} \times (1 - A / A_{max}) \qquad (4)$$

where: S_r is the required level of risk premium related to the size of the company; S_{max} is the maximum bonus amount (5%); A is the value of the assets of the company being assessed on the balance sheet as of the date of the assessment; A_{max} is the maximum value of assets among similar enterprises that carry out similar activities.

The discount related to the size of a company can be calculated as follows:

$$D_{sr} = 1 - \frac{1}{1 + S_r} \qquad (5)$$

The risk associated with company size is unique (Brown et al., 1983; Reinganum, 1981). The small-company risk premium reflects the additional premium for investing in higher-risk companies.

The application of both components in valuation practice primarily relies on the professional experience of the valuer, with most using approaches from Deloitte and Touche, Ibbotson Associates (Morningstar), and Duff and Phelps. Expert opinion should be based on the surrounding environment, industry analysis, and development of a specific business. This is especially difficult when preparing an assessment for a closed-type company (with limited, insufficient, inaccessible information). Business assessment is increasingly perceived as a science guided by objective statistical data. However, it can be assumed that the derivation of specific risk is a kind of "art" based on the professional competencies of the assessor.

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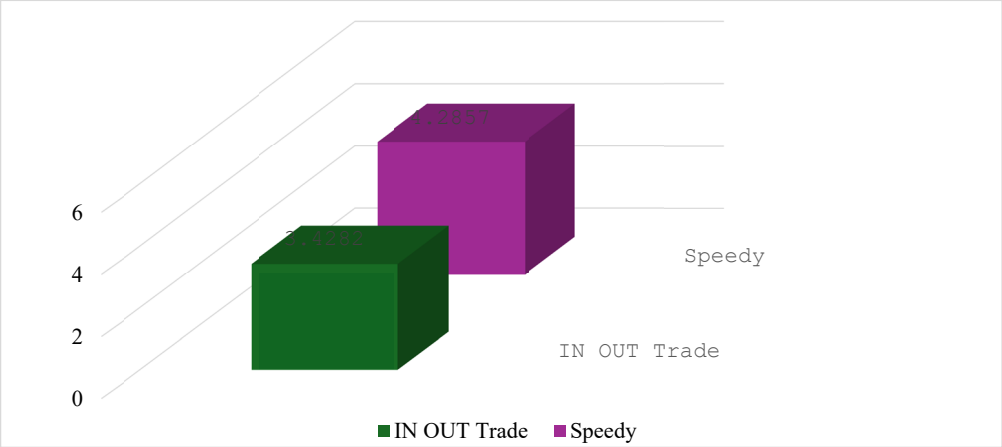

Fig. 4. Integral Indicator for Measuring Companies Risk (2021).

Fig. 4 shows that the indicator score for Speedy JSC is 4.2857, while for InOut Trade it is 3.4282. The difference was 0.8535, or 0.08535% and was considered a specific risk. As of 31.12.2021, InOut Trade's assets amounted to BGN 2,541 thousand, compared to Speedy's assets of BGN 253,906 thousand. Using the proposed formula, a 4.9% premium was calculated to account for risk related to company size. Applying the above formula also reflects a discount related to the company's size of 4.67%. As a result of these assumptions, the value of a 30% stake in InOut Trade is BGN 4,931,783 (EUR 2,521,580), which aligns with the analysis objectives.

6. Conclusions.

When undertaking a business or legal entity valuation, a fundamental element is analysing available information about the "market" to assist in deriving the value. However, a direct comparison with a relevant business, whether a company or a transaction, is rare, so the appraiser needs to conduct a broader study of comparable. Larger private companies and those with greater relative asset liquidity tend to have lower discounts. This finding provides a partial explanation for the discount of a closed-end company in addition to the previous explanations observed in the literature.

When valuing shares, it is essential to consider discounts related to the company's size and specific risk. The risk associated with company size is distinct, as the risk premium for smaller companies reflects an additional premium for investing in higher-risk entities.

It is calculated based on the assets of the assessed company and analogous enterprises. The discount rate is 4.67%. This study also proposes the calculation of unsystematic risk, which is based on an integral indicator for risk assessment.

Specifically, it considers the difference between each company's calculated levels, representing the discount for specific risks. The summary indicators for risk measurement include the Sharpe Ratio, Modified Sharpe Ratio, Treynor Ratio, Sortino Ratio, Information Ratio, Kalmar Ratio, and Modigliani Ratio (M-2).

The calculations yielded a score of 4.2857 for Speedy JSC and 3.4282 for InOut Trade. A difference of 0.8535, or 0.08535%, was considered a specific risk. The total discount, derived from the two components of company size and specific risk, is 13.205%.

The application of both components in valuation practice largely depends on the appraiser's professional experience. The expert opinion should be based on the analysis of the surrounding environment, industry trends, and, last but not least, the development of the specific company. This is particularly challenging when preparing an assessment for closed-type enterprises (with limited, insufficient, or inaccessible information).

Although business valuation is increasingly perceived as a science guided by objective statistical data, the derivation of specific risk remains, to some extent, an art that relies on the professional competencies of the appraiser.

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