

## THE ROLE OF DATA IN THE VALUATION OF AN ENTERPRISE – THE COST OF EQUITY

### ROLA DANYCH W WYCENIE PRZEDSIĘBIORSTWA – KOSZT KAPITAŁU WŁASNEGO

<https://doi.org/10.34739/zn.2019.49.08>

Edyta Piątek

Poland, University of Technology Kielce,  
ORCID: 0000-0003-0893-3799, e-mail: [epiatek@tu.kielce.pl](mailto:epiatek@tu.kielce.pl)

**Abstract:** The valuation of a company is a complex process and requires comprehensive knowledge. The decisions made at each stage have consequences for the next step. The first fundamental stage is to choose the standard of value that the valuer wants to determine. Only then is the appropriate valuation method selected. One of the further factors influencing the outcome of the valuation process is the cost of equity, which takes into account important parameters of the company's operation. It is the cost of equity that causes the most controversy and dilemmas. The research problem analyzed in the article is a way of calculating the cost of equity in enterprise valuation. The example of a specific valuation indicates that the cost of capital cannot be a parameter (data item) covering all risks, but only those that cannot be programmed in cash flows. In the course of research works, the valuation of enterprise B organized in the form of a general partnership as of 29.08.2014 in connection with its contribution by the shareholders to the joint-stock company A as an in-kind contribution increasing the capital was performed. Due to the fact that there is a minority shareholder in joint-stock company A, there is a dilemma of choosing the right value and valuation method and the method of calculating the cost of equity. Neither the literature on the subject in this respect, nor the parties to the transaction, indicate a clear solution, especially as regards the value of the cost of equity.

**Keywords:** cost of equity, fair market value

**Streszczenie:** Wycena przedsiębiorstwa jest procesem złożonym i wymagającym wszechstronnej wiedzy. Decyzje każdego etapu rodzą konsekwencje dla następnych działań. Pierwszym fundamentalnym etapem jest wybór standardu wartości jaką wyceniający chce ustalić. Następnie dopiero decyduje się o właściwej metodzie wyceny. Jednym z dalszych czynników wpływających na efekt końcowy procesu wyceny jest koszt kapitału własnego, który uwzględnia ważne parametry działania przedsiębiorstwa. To koszt kapitału własnego wzbudza najczęściej kontrowersji i dylematów. Problemem badawczy analizowanym w artykule jest sposób odniesienia kosztu kapitału własnego w wycenie przedsiębiorstwa. Na przykładzie konkretnej wyceny wskazano, że koszt kapitału nie może być parametrem (daną) ujmującym wszystkie ryzyka, a tylko tych które nie da się zaprogramować w przepływach pieniężnych. W toku prac badawczych przeprowadzono wycenę przedsiębiorstwa B zorganizowanego w formie spółki jawnej na dzień 29.08.2014 r. w związku z jego wniesieniem przez wspólników do spółki akcyjnej A jako aport podwyższający kapitał. W związku z faktem, iż w spółce akcyjnej A funkcjonuje akcjonariusz mniejszościowy pojawia się dylemat wyboru właściwej wartości i metody wyceny oraz sposobu kalkulacji kosztu kapitału własnego. Literatura przedmiotu w tym zakresie, podobnie jak strony transakcji, nie wskazuje na jednoznaczne rozwiązania, szczególnie jeśli chodzi o wartość kosztu kapitału własnego.

**Słowa kluczowe:** koszt kapitału własnego, godziwa wartość rynkowa

#### Introduction

The fundamental stage of the valuation process is to determine the standard (category) of value for the valuation of a given object. The choice of a relevant value standard is often dependent on a variety of circumstances, terms, conditions, subject matter, contract, agreement, law or other factors. For professional valuation, the use of a particular value

standard has significant implications with regard to the assumptions, methodologies and techniques that should be used in valuation.

#### Literature review

By indicating a value standard, the parties to an actual or hypothetical transaction and the terms on

which the transaction is to be entered into are defined. There are four basic value standards:

- (i) the fair market value,
- (ii) the fair value,
- (iii) the investment value,
- (iv) the intrinsic value.

The last one is also called the fundamental value.

The above standards are mixed up as a consequence of two most important premises of value: the interchangeable value and the value to the holder (Fishman, Pratt, Morrison, 2007).

These two indications of value are decisive in determining which value standard to apply. Value in exchange is the value of a business or share in a business that changes ownership in reality or hypothetically. In accordance with this standard, it is necessary to consider whether, from the perspective of the objective of valuation, discounts due to lack of control and lack of liquidity apply. The fair market value and, to some extent, the fair value standards are affected by the assumption of value in exchange. However, the *value to the holder* represents the value of the property that is not sold but maintained, preserved in its current form by the current owner. Ownership does not necessarily have to be market-driven or enjoy demand to be valued. The value to the holder may be greater or smaller than the value in exchange (Szymański, 2015). As a result, P. Szymański points to the following dependencies:

Value in exchange	Value to the holder	
fair market value	fair value	investment value

When determining the value, the investment value, as the value of assets or business for a specific current or potential owner, requires, consideration of the current or potential owner's knowledge, capabilities, expectations, risks and income and other factors. The investment value must take into account possible synergies such as cost savings, economies of scale, improvement of competitive position, restrictions of price competition, etc. As a result, the investment value reflects the possible creation of added value, which may be higher than the fair market value. It reflects the value of the property not from the perspective of a hypothetical investor but of a particular individual (current or potential personalized owner) as opposed to fair market value where the potential owner is impersonalized.

Market value is defined as the estimated amount that can be derived, at the valuation date, assuming that the parties have a positive intention to enter into an agreement, are independent of each

other, act knowledgeably and prudently, are not in a position under pressure and an appropriate period of exposure of the real estate on the market has elapsed.

The Common National Valuation Rules in the General Valuation Rules of Companies equate market value with fair market value. Fair market value is the value of the object of valuation expressed in money or a suitable equivalent, in the estimation of which it is assumed that the transaction involves a typical hypothetical buyer and a typical hypothetical seller, interested in the transaction and not acting under pressure (and on imperative). It is assumed that the valuer has an adequate amount of information about the parties to the transaction and the buyer and seller have an adequate amount of knowledge about the subject of the valuation. The value determined on the basis of the fair market value category is accepted by the buyer and the seller (Zarzecki, Mączyńska, Beer-Zwolińska, Bombała, Filipiak, Grudziński, Habdas, Konowalczyk, Panfil, Pęksyk, Prystupa, Ramian, Szymański, 2010).

The literature on the subject correlates the above definition, the definition of market value, understood as the most probable price that a willing buyer would offer to a willing seller in exchange for the subject of the transaction, assuming the equality of the parties and their independence, without any compulsion influencing the decision to buy and sell, with full knowledge of the subject and circumstances of the transaction at a given time.

In this study, both fair market value and investment value may be used in the valuation of the examined company. However, due to the fact that there is a minority shareholder in company A, it is justified to apply the valuation at fair market value. It is not in their interest to assess the investment value, as this value will, by its very nature, be higher than the fair market value. The higher value of the company will translate into higher equity taken up for the contribution made, limiting the share of the same minority shareholder.

The choice of fair market value is also justified by the regulations of the Polish Commercial Companies Code. Article 311 § 1 of the Code stipulates that if contributions in kind are provided for to cover the share capital, the founders of the company shall draw up a written report which shall in particular (among others) present: – the subject of non-cash contributions and the number and type of shares and other titles of participation in income or in the division of the company's assets issued in exchange for them, – the people who make non-cash contributions, sell property to the company or

receive remuneration for services, – the applied method of valuation of contributions. The next § 1 of Art. 312 of the Code indicates the necessity to examine whether the fair value of non-cash contributions at least corresponds to the nominal value of the shares subscribed for via them or a higher issue price of shares. The general requirement of the Code in a share issuance situation is to set the issue price at least at nominal value level. When a company is established, the issue price of the shares usually corresponds to the nominal value of the shares. For subsequent share issuances, the issue price is usually not equal to the nominal value. This is due to the fact that the issue price should reflect the fair value of one share of the company, which varies over time according to the economic situation of the entity (Cygański, 2016). Economic practice shows that new share issuances covered by in-kind contributions are often directed to majority shareholders or their affiliates. In such a situation, there is a risk that an overvaluation of the non-monetary contribution will not only distort the company's balance sheet, but also negatively affect the value of shares held by minority shareholders – to the benefit of majority shareholders or their affiliates.

The same valuation methods will be used to determine each of the values considered, and the differences will relate to the assumptions made therein, including the cost of equity.

The literature on the subject (Panfil, 2008) indicates the methods of valuation based on income or property and mixed methods to determine the values presented above. Among the income-based methods, the most popular operating method for valuation of enterprises used by practitioners is the discounted cash flow method. It may be used to determine both fair value, fair market value, investment value and fundamental value.

### Methodology and theoretical basis

To illustrate the essence of the problem of determining the cost of equity, the valuation of the selected enterprise using the DCF method was

presented. This method requires the use of the cost of equity that captures various business risks. An example of the valuation of a selected enterprise then became the subject of considerations for various adjustments and bonuses incurred through the cost of capital.

The DCF method determines the current value of the company based on forecasts of the value of the cash that it is able to generate in the future. In order to obtain the current value of the company, a forecast of future operating cash flows is made, which are discounted, i.e. their current value is determined. This is because the money received today is worth more than it will be in the future.

For the investigated company, the following valuation parameters were established:

The forecast period should cover the number of years over which a company will be able to achieve returns on assets higher than the cost of capital. After this period, it enters the period of stabilization (slowdown in growth), and changes in revenues are not as dynamic as before. The forecasting period usually covers a period of up to 5 years. Sometimes it is possible to adopt a forecast period of up to 10 years. This depends mainly on the branch in which the company operates. The more mature the industry, the lower the barriers to entry and lower the margins, the shorter the forecast period will be – in highly competitive industries with low margins, the period may be only one year. In industries with high barriers to entry and a strong position of the company, this period is extended.

In order to determine the cash flows for each year, it is necessary to forecast revenues. Next, the dynamics of changes in other elements influencing the final value of cash flows (including operating expenses) is determined. To determine the rate of revenue growth in the audited entity, historical changes in revenue, forecasts for the Polish economy and the establishment of the company were used. Three scenarios of changes in revenues were adopted:

**Table 1.** Forecasts of the revenue growth rate

Forecasts of revenue in %	2015	2016	2017	2018	2019	2020
Revenue realistically	1.5	3.5	5	5	5	5
Revenue pessimistically	-1.5	0.5	1.5	2	2	2
Revenue optimistically	3.5	7	10	10	10	10

Source: authors' own elaboration based on available financial data

The real forecast of revenue growth results from historical data and forecasts of changes in the

economy. The optimistic forecast results from the assumptions of the company's management board.

However, the pessimistic forecast was based on 2011, the worst year of operation of the company.

Free Cash Flow Estimation (FCF) in the company was carried out through a summary of generated revenues minus operating costs, taxes, net investments and changes in the net working capital.

The discount rate in the valuation of companies using the DCF method is assumed to be the weighted average cost of capital (WACC). In order to calculate the weighted average cost of capital (WACC), the cost of equity and borrowed capital must first be calculated.

The CAPM model (Capital Asset Pricing Model) was used to determine the cost of equity. In this model, the formula for calculating the cost of equity is as follows: where:

$$Re = Rf + \beta (Rm - Rf)$$

$Rf$  (risk-free rate) – rate of return on investment in risk-free assets. 5-year Treasury bond yields for 2014 were assumed – 3.18% (<http://stat.gov.pl>)

$\beta$  (beta) – a coefficient measuring the price of a company's shares in relation to the market as a whole. A beta value of 1 means that the shares move statistically like the market, a value greater than 1 means that the shares react in the same direction, but more intensively than the market. On the other hand, a value below 1 means that the securities are more stable and react slower than the market. It also sometimes happens that a company's shares have a beta of less than 0 – then the stock prices move in the opposite direction to the market. As the company belongs to the metal industry, the average coefficients for metal industry enterprises for 2010-2013 listed on the Warsaw Stock Exchange were assumed: 0.73.

$(Rm - Rf)$  – market-risk premium (expected market return minus rate of return on risk-free assets). Adopted as a Total Equity Risk Premium for Poland in the amount of 6.28% (Damodaran Online, 2014).

The cost of borrowed capital ( $Rd$ ) is the weighted average interest rate a company pays on its debts taking into account the tax shield.

$$Rd = Rd * (1 - \text{tax rate})$$

The cost of borrowed capital was adopted at the level of the credit cost in the current account available to the company on the day of valuation (margin 2.90 % + 1 m WIBOR (2.59 %)) and resulting from agreement No. 115/SME/2013 of 06.12.2013. The tax rate corresponds to a tax rate of 19%.

The total value of the company thus consists of the value of all cash flows (discounted to an initial period) and the discounted residual value less the

value of all debts of the company. As a result of the adopted methodology and fundamental analysis of the company, its valuation was carried out in accordance with the table below (Table 2).

The value of the company was estimated at the amount of: PLN 4,594,667.59, and the cost of capital was determined based on the rate of return on investment in risk-free assets and market risk premium. The analysis of literature and valuations of private parties to the sale of the company indicates that the valuers use the cost of equity to capture the various risks that they identify in the course of valuation. The critical analysis shows that most risks are not justified in terms of cost of capital, especially as they can be included in the estimated cash flows.

## Results and discussion

As has already been stated, practice and theory mention and apply a number of methods for estimating the value of a company. Similar diversity is identified in the case of methods for estimating the cost of equity, which is an important element of the "valuation algorithm".

The choice of a particular method for estimating the cost of equity generally applies to the income approach. Which methods provide the best estimates for this key parameter in the valuation is the subject of numerous publications. Different methods usually lead to different results, which generate different value estimates. The choice of the method for estimating the cost of equity is therefore fundamental. One of the methods is the CAMP method, which in literature and practice is considered adequate for estimating free flows (Nita, 2008). It was precisely the use of the CAPM model that determined the cost of production of the studied company. The analysis of the study did not focus on the models for determining the cost of capital itself, nor on the risks it should reflect in the form of various bonuses or adjustments.

A special element of the cost of capital is the risk premium. This parameter ( $Rm - Rf$ ) – market risk premium (expected market rate of return minus the rate of return on investment in risk-free assets) in the study was adopted as the Total Equity Risk Premium for Poland in the amount of 6.28% (Damodaran Online, 2014). Various studies show that risk premiums typically range from 2% to 10%, with predominant bonuses ranging from 5% to 8%. The differences result from the fact that different additional risks, such as volume risk and liquidity risk premiums, are included in this element (Zarzecki, 2013).

Table 2. Discounted free cash flow of the company

Period	CP/Total	2014	2015	2016	2017	2018	2019	2020
<b>Sales revenue</b>		5,837,716.11	5,922,670.04	6,129,963.49	6,436,431.41	6,758,252.98	7,096,165.63	7,450,973.91
Costs of		5,436,413.73	5,613,137.31	5,745,974.92	6,146,648.53	6,324,207.71	6,754,334.85	6,967,968.34
<b>Investment outlays</b>		0.00	100,000.00	0.00	100,000.00	0.00	100,000.00	0.00
<b>Depreciation</b>		167,924.00	211,465.00	119,465.00	239,465.00	121,665.00	241,665.00	129,665.00
<b>EBIT (2-3)</b>		401,302.38	309,532.72	383,988.57	289,782.87	434,045.27	341,830.78	483,005.57
<b>Ebit x (1- income tax rate 19%)</b>		325,054.93	250,721.51	311,030.74	234,724.13	351,576.67	276,882.93	391,234.51
<b>Total working capital (9+11-10)</b>	1,168,138.12	1,187,664.54	895,914.47	1,249,770.27	1,312,259.02	1,377,871.62	1,446,765.17	1,519,104.11
Receivables	1,664,676.92	1,715,050.73	1,740,776.49	1,801,703.67	1,891,788.85	1,986,378.29	2,085,697.21	2,189,982.07
Liabilities	750,226.43	780,472.19	1,101,744.31	817,806.57	858,696.66	901,631.84	946,713.46	994,048.45
Inventory	253,687.63	253,086.00	256,882.29	265,873.17	279,166.83	293,125.17	307,781.43	323,170.50
<b>Change in working capital</b>		19,526.42	-291,750.07	353,855.80	62,488.75	65,612.60	68,893.55	72,338.94
<b>Free cash flows FCFF</b>								
Ebit x (1- income tax rate 19%)		325,054.93	250,721.51	311,030.74	234,724.13	351,576.67	276,882.93	391,234.51
Depreciation		167,924.00	211,465.00	119,465.00	239,465.00	121,665.00	241,665.00	129,665.00
Change in net working capital		-19,526.42	291,750.07	-353,855.80	-62,488.75	-65,612.60	-68,893.55	-72,338.94
Investments		0.00	100,000.00	0.00	100,000.00	0.00	100,000.00	0.00
<b>Total free cash flows FCFF (14+15+16+17)</b>		473,452.51	853,936.58	76,639.94	511,700.37	407,629.06	549,654.38	448,560.57
Cost of equity		7.76%	7.76%	7.76%	7.76%	7.76%	7.76%	7.76%
Rate of return on debt financial instruments		3.180%	3.180%	3.180%	3.180%	3.180%	3.180%	3.180%
Premium for investment market risk		6.280%	6.280%	6.280%	6.280%	6.280%	6.280%	6.280%
Beta coefficient		0.730	0.730	0.730	0.730	0.730	0.730	0.730
Share of equity capital		97%	91%	97%	97%	97%	97%	97%
Cost of borrowed capital		5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Cost of borrowed capital including tax shield 19%		4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%
Share of borrowed capital		3%	9%	3%	3%	3%	3%	3%
<b>Weighted average cost of capital (WACC) (19x23+26x)</b>		7.66%	7.46%	7.67%	7.67%	7.67%	7.68%	7.68%
Discount factor		0.929	0.866	0.801	0.744	0.691	0.642	0.596
<b>Free cash flows FCFF discounted (18/29)</b>		509,736.59	986,076.44	95,657.90	687,727.93	589,958.46	856,682.01	752,907.02

The volume risk premium is a parameter that increases the discount rate applied in valuation of companies of medium, small and micro capitalization. The application of the volume risk premium is based on the belief that small and medium-sized enterprises have a higher operational risk. The volume risk premium is the additional rate of return expected by investors on investments in small and medium-sized enterprises. Especially, when the discount rate has been estimated on the basis of a long-term general market risk premium (ERP) for the portfolio of companies with high capitalization and where the beta ratio represents the systematic risk of companies significantly larger than the valued company, a premium for additional risk resulting from the small size of the valued company is required. It is therefore a kind of a market anomaly that suggests that smaller companies generate higher rates of return than larger companies.

In the literature on the subject, one can find studies both confirming and negating this effect, or even studies indicating the occurrence of an inverse relationship (Zarzecki, Byrka, Kozłowska-Nalewa). Professor Dariusz Zarzecki points to the difficulty in estimating this parameter: (Zarzecki, 2013): *Risk estimation in the valuation of small businesses. The risk of investing in small businesses increases with decreasing capitalization. Therefore, there is a negative correlation between market capitalization of companies and risk. The standard deviation of the average rate of return in individual deciles increases with the decrease in the size of companies. However, the increase in risk measured by the standard deviation is proportionately greater than the increase in the average rate of return of a given portfolio, which is reflected in the increasing volatility coefficient. This is the so-called volume effect, which manifests itself in several ways. First, the higher risk of small businesses is not fully offset by the higher rate of return (in the context of the CAPM model). The CAPM gives points only for systematic risk (so-called beta risk). Small companies have rates of return higher than the rates set by the CAPM. Secondly, there are differences in the autocorrelation of the calendar annual rates of return between small and large companies. A positive autocorrelation can be used as a trend indicator and thus be used to predict future returns. In the case of the smallest companies, autocorrelation is the largest. Thirdly, the "volume effect" is seasonal in nature. It can be*

*said that it coexists with other so-called anomalies on the capital market. The volume premium in response to the disclosure of the so-called volume effect has now become an important component of the valuation process.*

As already mentioned, this formula ( $R_m - R_f$ ) was adopted as a *Total Equity Risk Premium* for Poland in the amount of 6.28%, considered to reflect any risk of doing business in Poland. The classic CAPM model assumes that all risks, except market risk (beta risk), can be diversified (Zarzecki, 2014) by any rational investor. It follows that, assuming a simplified method, serving as a confirmation of the value of the company determined by another method, e.g. property value adjustment in the valuation by the size of the company, is not justified. The situation is similar with adjustment for the lack of or limited liquidity and marketability risk.

A liquidity risk adjustment is applied when a company is absent from an organized market, i.e. the stock exchange. Numerous studies conducted in the USA show that average illiquidity discounts range from 30% to 40% (Wiśniewski, 2018). This is a very large difference in relation to the valuation of listed companies, which indicates the great importance of correct estimation of appropriate discount rates. As a representative of one of the parties to the transaction, Deloitte Advisory Sp. z o.o. sees the need for such a correction at the level of 13%. In the audit, the above adjustment was abandoned because the valuation using the income method was a simplified valuation and served basically to confirm the value determined using the adjusted asset method in connection with assets not disclosed in the balance sheet: intangible assets.

The literature on the subject also mentions the risk of concentration of the clients' portfolio, which should be reflected in the cost of capital, especially in the situation of personal and capital ties between the company and a significant group of clients.

In the case at hand, the valued company concentrated its sales in a group of companies related to the owners selling the company. There was a risk that the company's client package would leave if it was sold to an independent buyer. The concentration of the portfolio of clients in the group of entities related personally and in terms of capital to the partners-sellers was not accounted for through the cost of equity but through the adoption of a realistic forecast of revenue growth:

**Table 3.** Forecasts of the revenue growth rate

Forecasts of revenue in %	2015	2016	2017	2018	2019	2020
Revenue realistically	1.5	3.5	5	5	5	5
Revenue pessimistically	-1.5	0.5	1.5	2	2	2
Revenue optimistically	3.5	7	10	10	10	10

Source: authors' own elaboration based on available financial data

Their level was calculated on the assumption of organizational and management deficiencies of the company, including regular Clients and Clients independent of the seller for the products and services of the valued company. This assumption underlies the fair market value method applied.

The concentration of the client portfolio in the group of entities related personally and in terms of capital with the partners, and thus a significant impact on the ability to sell, was decisive for the recommendation to use the property method in the valuation.

Weight will also play a role in the valuation using the weighted average cost of capital ("WACC"). Some researchers indicate that the financing structure should be determined on the basis of market data, and the weights of debt and equity should represent their long-term, target relationship, the best approximation of which is the capital structure determined by the market (i.e. such as the average of entities comparable to the valued entity). The second section of practitioners and theoreticians explains that weights can be based on both market and balance sheet values. The balance sheet value approach is supported by the fact that:

1. Market value can be difficult to determine, book values are always available in the balance sheet of the company.
2. The market value, and in particular the equity value, is subject to large fluctuations due to changes in share prices on the capital market and the book value is more stable, which means that it can be regarded as a better point of reference.
3. The share of debt calculated according to market values is usually smaller than for book values, which reduces its relative role in the shaping process (Duliniec, 2001).

Although the literature on the subject provides a way to calculate the WACC on the basis of book values of capital, it is recommended due to difficulties in estimating market values, e.g. in the case of small companies, or in order to simplify the method of calculating the WACC (Dudycz, 2005). Although market values are preferred, there are many difficulties in determining the market value of

debt and equity. [...] In the case of an unlisted company, this value [market value of the debt – JK] can be calculated by discounting the future cash flows for each instrument [...]. If such information is not available, the book (Mills, 2005) value of the debt may be used as an approximation of its market value.

In the efficiency account of small and medium-sized enterprises carried out at the pre-investment stage, share payments and incurred debts shaping the book value of capital recognized in the balance sheet correspond basically to their market values. In the forecasts of the capital structure in the exploitation phase, the book values of the capital are practically the only categories that can be used in the calculation of the total capital cost involved in the project (Pawłowski, 2007).

According to the second group of the valuation experts, the most common method of estimating the market values of particular sources of financing is approximate and on this basis the weights to the formula for the weighted average cost of capital (Zarzecki, 1999) are determined.

In the WACC estimation process, there occurs a vicious circle problem. It consists in the fact that in order to determine the WACC, we need weights based on market values, but [...] we cannot know the market value of equity without knowing the value of the WACC (Kuczowicz). Compliance with the theoreticians' proposed rules for determining the weights needed to be used in the WACC formula is often impossible due to a lack of reliable data. This is a typical situation for countries where the capital market is in the initial phase of development, thus countries such as Poland. The book values of equity and debt are then used out of necessity and have been used in the present case.

## Conclusions

It seems clearer and simpler to apply the risks described above in a direct way, that is by including them in the volume of projected flows, not just the cost of capital. Obtaining detailed data on the property, financial, operational and market situation during the fundamental analysis performed allows taking into account all identified risks and their

translation into forecast cash flows. Lack of fundamental analysis of the valued company makes it necessary to include the risks described in the article by implementing them in the cost of equity. Such action is only justified when comparative methods are used. For cash flow-based methods, the direct recognition of risks in the forecast flows provides a guarantee that true and reliable information is received in accordance with the fair value concept. Evidence of such a statement being true is the fact that the value of the company in the study in question was established at over PLN 4.5 million, compared to PLN 10.5 million obtained by a private team using the described adjustments to the cost of capital on the flows provided by the interested seller, without conducting a fundamental analysis.

## References

- Byrka-Kita K. Weryfikacja przydatności modelu wyceny aktywów kapitałowych (capm) w procesie szacowania kosztu kapitału własnego na polskim rynku kapitałowym. ([http://mikroekonomia.net/system/publication\\_files/1131/original/15.pdf?1315295915](http://mikroekonomia.net/system/publication_files/1131/original/15.pdf?1315295915)).
- Cygański, P. (2016). Wycena spółek w świetle kodeksu spółek handlowych. Wybrane zagadnienia. *Finanse Rynki Finansowe Ubezpieczenia* nr 4/2016 (82). cz. 2.
- Damodaran, A. (2014). *Country Default Spreads and Risk Premiums*. Online: [http://pages.stern.nyu.edu/~adamodar/New\\_Home\\_Page/datafile/ctryprem.html](http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html)
- Dudycz, T. (2005). Zarządzanie wartością przedsiębiorstwa. PWE. Warszawa.
- Duliniec, A. (2001). Struktura i koszt kapitału w przedsiębiorstwie. Wydawnictwo Naukowe PWN. Warszawa.
- Kuczowicz, J. Zmienne oblicza WACC. [https://sbc.org.pl/Content/101254/12\\_J.Kuczowicz\\_Zmienne\\_oblicza\\_WACC.pdf](https://sbc.org.pl/Content/101254/12_J.Kuczowicz_Zmienne_oblicza_WACC.pdf)
- Mills, P. (2005). Dynamika wartości przedsiębiorstwa dla udziałowców. ODDK. Gdańsk.
- Nita. B. (2008). Szacowanie przepływów pieniężnych i stopy dyskontowej w dochodowym podejściu do wyceny przedsiębiorstwa. *Prace Naukowe Akademii Ekonomicznej we Wrocławiu* nr 1196.
- Panfil, M., Szablewski, A. Metody wyceny spółki. Perspektywa klienta i inwestora. Poltext.
- Pawłowski, J. (2007). Wybrane metody oceny efektywności finansowej przedsiębiorstw gospodarczych. Wydawnictwo Uniwersytetu Łódzkiego. Łódź. 144.
- Szymański, P. Standardy wartości w wycenie przedsiębiorstw. *Zeszyty Naukowe Uniwersytetu Szczecińskiego* nr 855. *Finanse Rynki Finansowe Ubezpieczenia* nr 74.
- Wiśniewski, T. (2018). Wybrane premie i dyskonta w wycenie przedsiębiorstw - praktyczne podejście. *Finanse Rynki Finansowe Ubezpieczenia* nr 1/2018 (91).
- Zarzecki, D. (2013). Kluczowe wyzwania wyceny przedsiębiorstw. Wycena zobowiązań warunkowych i aktywów nieoperacyjnych. *Zeszyty Naukowe Uniwersytetu Szczecińskiego*. nr 768 *Finanse Rynki finansowe Ubezpieczenia* nr 63/2013.
- Zarzecki, D., Mączyńska, E., Beer-Zwolińska, A., Bombała, B., Filipiak, J., Grudziński, M., Habdas, M., Konowalczyk, J., Panfil, M., Pęksyk, M., Prystupa, M., Ramian, T., Szymański, P., Ogólne zasady wyceny przedsiębiorstw. Nota Interpretacyjna NI 5 Wycena przedsiębiorstw: Udział rzeczoznawców majątkowych w wycenie przedsiębiorstw. Zasady dobrej praktyki zawodowej. XIX Krajowa Konferencja Rzeczoznawców Majątkowych. Kielce. pp 299–314.
- Zarzecki, D. (2014). Ryzyko a koszt kapitału – wybrane problemy. *Zeszyty Naukowe Uniwersytetu Szczecińskiego* nr 804. *Finanse Rynki Finansowe Ubezpieczenia* nr 67/2014.
- Zarzecki, D. (1999). Metody wyceny przedsiębiorstw. Fundacja Rozwoju Rachunkowości w Polsce. Warszawa.