Uniwersytet Rzeszowski

Kolegium Nauk Społecznych Instytut Ekonomii i Finansów

mgr Michał Gnap

Wpływ stosowanych metod na wiarygodność wyceny spółek giełdowych

Streszczenie pracy doktorskiej w języku angielskim

Praca napisana pod kierunkiem: prof. dr hab. Jerzego Kitowskiego

Promotor pomocniczy: dr Wojciech Lichota Analysing the last two decades regarding the functioning of the capital market in the world, one can notice significant volatility in the share prices of companies listed on the public market. At that time, we were dealing with the emergence and bursting of the internet bubble and subprime crunch, which in turn caused a significant depreciation of the value of companies. During the bull market, discounted cash flow methods were prepared in isolation from fundamental results or the business cycle.

Therefore, it can be concluded that it is a huge challenge for the analyst to carry out the valuation in a period of excessive optimism and simultaneously strong pessimism about the market. In a situation of turmoil in the capital markets, even the application of the best theories, methods and tools does not have to reflect the market valuation of the company and its equity. Therefore, in the author's opinion, it is worth putting more emphasis on identifying and explaining the discrepancies between the results of the valuation and the market value of the valued company.

Considerations in the dissertation focus on the selection of an appropriate method of estimating the value of an enterprise. The main objective of the dissertation is to examine the methods and principles of business valuation occurring in theory and used in practice and to develop a valuation template that increases the reliability of the assumptions contained in the valuation.

Four specific objectives have been formulated to achieve the main objective. In addition, the following hypotheses were assumed and verified in the work:

- 1. A reliable estimate of the value of an enterprise depends on the adopted method and the appropriate definition of input parameters, determined on the basis of actual economic values.
- 2. The valuation of an enterprise is the main factor in investments made by external entities.
- 3. Maximizing the value of the enterprise results from a long-term budgeting strategy.
- 4. The value of the valuation depends on the free cash flow generated by the business entity.

The scope of the deliberations was assigned to the layout and content of the work. The work consists of an introduction, five chapters and an ending.

In the first chapter, attention is focused on different ways of understanding the value of an economic entity. The concept of the value of the enterprise is presented from the perspective of the owners as well as potential investors. The definition of the main valuation standards is presented, which facilitate the organization of knowledge and the determination of the value of the enterprise in a universal way. In the further part of the chapter, the economic factors that create the value of the subject, value generators are characterized. The value of a company can be described not only from the perspective of approaches or standards, but also from the side of the factors that create it. Their acquaintance, then separation and control lead to an improvement in the efficiency of the functioning of the business entity. Managing a company by maximizing its value involves close monitoring and control of these factors. Later in the chapter, the valuation considerations are reviewed. The essence of the valuation of the enterprise is explained and the rules to be followed when determining its value are discussed. Subsequently, the premises and functions of the valuation were analysed, paying particular attention to the objectives of the valuation. The first chapter closes with considerations on the concept of enterprise value management.

The second chapter is devoted to the relation of the subject of the trial to its material scope that is the management by value through the appropriate selection of the valuation method. Moreover, various valuation methods were presented and critically analysed. The methods of the free cash flow account, which are the basis for preparing income valuations and assessing their impact on the value of the capital involved, were also indicated. Given the central role of the cost of capital in the valuation process, it was emphasized that different methods of estimating the cost of capital employed in an enterprise do not give the same results. The last part of the chapter is devoted to the characteristics of comparative methods, the wide use of which in practice results primarily from the simplicity of the valuation results obtained, ease of understanding and acceptance by investors. This approach also takes into account the current market situation, measures the relative value of the company, which makes the valuation more strongly related to current trends in the capital market. Defining these specific methods based on the market comparison model is the crowning element of chapter two of the dissertation.

The third chapter is devoted to the use of real options regarding the management of enterprise value. One of the most popular models of estimating the value of an enterprise based on the principle of free cash flow is treated as a static method. It is understood that the operating activities of the company, which are the basis for determining free cash flow, are predetermined and it is not assumed

that they will change. Even the introduction of a scenario analysis does not change this fact and seems to be insufficient to correctly simulate economic reality. The use of options for the valuation process to increase the company's potential is designed to make the forecast of benefits more flexible. The theory of real options can be used to recognize additional value for companies making innovative investments, based on knowledge, engaged in research and development activities. The following part of the chapter presents a typology of options in terms of both classic financial options and real options. In addition, difficulties resulting from the use of real options in practice were indicated, consisting in the need to take into account many different options in the analysis of bundles whereas such a portfolio structure requires detailed identification and analysis of factors included in real options.

In the fourth chapter, empirical identification of the methods of enterprise valuation was made. The analysis used information from the valuation methods used available in the valuation reports of listed companies in the years 2008 – 2017. Such a time horizon allowed for the implementation of the purpose of the study because reports theoretically should be prepared in accordance with the KSWS (Krajowy Standard Wyceny Specjalistyczny). The study covered companies continuing their operations on the Warsaw Stock Exchange from the WIG 20 index. This index was chosen by the author due to the high value of turnover, which reduces the risk of speculative transactions that may affect a share price. An additional criterion was also the continuity of quotations in the years 2008-2017. Banks, insurers and financial services providers – and therefore entities considered to be specific in terms of their business activities – were excluded from the sample. Empirical materials which were the subject of the audit were used: financial statements and additional information constituting an integral part of the financial statements. Stock exchange recommendations prepared by brokerage houses were also used. The study included the identification of the valuation methods used in relation to the specifics of the company's activities.

In the fifth chapter, a template for the valuation of an economic entity has been developed, increasing its credibility and comparability. First of all, the analyses carried out in chapters one, two, three and four were summed up, as well as the assessment of the existing valuation methods and principles. On the basis of the findings made, a proprietary solution was developed in the form of a template for the valuation of a business entity, increasing its credibility and comparability.

The culmination of the work is the completion, in which the degree of achievement of the set goals, the results of work in the theoretical layer as well as its usefulness from the perspective of economic practice were assessed.

The key conclusions of the conducted research are as follows:

- 1) It is recommended to use the iDCF FTF and iDCF FTE methods as the methods best reflecting the value of the company due to the fact that the level of WACC fluctuates with the change in the financing structure. These methods will be complementary and not, as it is currently, an alternative;
- 2) In order to reduce multi-variation, it is recommended to specify a valuation standard for each valuation purpose, for internal and external needs. In the case of valuation for internal purposes, the arrangement could be open, which would indicate a minimum range of information, although it would be extensive enough not to require the use of excessive simplifications;
- 3) In order to increase the reliability of the valuation report, it is recommended to introduce a threshold, on the basis of which the measurement entity is required to explain material deviations between the measurement results from the methods used in the reports and the deviations of their results from the market value of the company;
- 4) With regard to the estimation of the average cost of capital, additional information on the technique for estimating the cost of capital shall be disclosed;
- 5) It is proposed that the forecast period covered by the valuation method be divided into a detailed analysis covering 3 years of forecast (projections based on sales orders, long-term contracts) and a general analysis covering the remaining 7 years of the forecast (projections based on data relating to the prospects for the development of the market in which the company operates). Such a division will improve the decision-making usefulness of the information;
- 6) It is also recommended that the flexibility of response be recognized in the measurement process in the form of taking into account real options. The added value of using the option model in the valuation process is primarily the ability to take into account the flexible response of the managerial. The inclusion of real options in the measurement process is possible if the appraisal has the appropriate information on the basis of which it can estimate

them. The development of the company should therefore be treated as the right to make financial decisions in the future.

The author of the work wants to emphasize the thesis that the valuation of an enterprise is both a theory and an art based on the intuition of the appraisal. You should be aware that there will be bear and bull market periods on the capital markets, hence the valuation of companies will be inflated during the bull market and discounted during the bear market. As a result, the usefulness of technical analysis decreases and may mislead investors. It is therefore imperative to focus on fundamental analysis