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## ENTERPRISE VALUATION USING THE ADJUSTED NET ASSETS METHODOLOGY – CASE STUDY

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**Abstract:** The purpose of this article is to supplement the space between the theoretical and practical approach to business valuation method adjusted net assets. The combination of legal principles and recommendations of how to establish the theoretical adjustment of individual balance sheet items valued companies, using the examples from the Polish capital market, allows the reader familiar with same accounting policies to make the company's valuation using the presented method. The author proposes ways to determine the corrections, especially for other funds, unlisted joint stock companies and bonds due to the acceptance of an independent auditor and the Financial Supervisory Commission who, in turn, provide an assurance of the correctness of a valuation prepared in this way.

**Keywords:** company valuation, net assets, equity, liabilities.

### 1. Introduction

An enterprise is a special form of organized activity aimed at creating added value<sup>1</sup>. The better it is managed and the more effectively it allocates its resources, the greater the added value can be achieved and the higher rate of return on invested capital can be guaranteed to investors. Activity taken by a company to achieve this aim from the perspective of investors is connected with risk<sup>2</sup>. One way to monitor this risk is to make periodic valuations of the company capital and analyze the trends of their changes. Determining the value of the company – to make its valuation – is also necessary in the case of privatization, restructuring and mergers or acquisitions<sup>3</sup>.

A business valuation can be made by using any of methods contained in these five groups<sup>4</sup>:

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<sup>1</sup> H. Zadora, *Wycena przedsiębiorstw w praktyce i teorii*, Stowarzyszenie Księgowych w Polsce, Warszawa 2010, p. 9.

<sup>2</sup> In the case of stock enterprises, the risk may be associated with obtaining rates of return other than that expected, which consists of the market value of equity growth and dividend payout.

<sup>3</sup> P. Fernadez, *Valuation Methods and Shareholder Value Creation*, Academic Press, San Diego 2002, p. 23.

<sup>4</sup> A. Szablewski, R. Tuzimek, *Wycena i zarządzanie wartościami firmy*, Poltext, Warszawa 2008, pp. 143-154.

- Property methods;
- Comparative methods;
- Income methods;
- Mixed methods;
- Property options methods<sup>5</sup>.

The choice of valuation method according to its aim is regulated by law. The basic legal acts defining how to prepare a valuation of an enterprise in Poland are: the Regulation of the Minister of Privatization from 20 November 1990 on the method of analysis of legal, economic and financial enterprises, and the classification of documents required from the people performing analysis<sup>6</sup>. Regulation of the Council of Ministers from 3 June 1997 regarding the analysis of a company and state enterprises, the way of its commission, development, acceptance and funding rule<sup>7</sup> is another important rule governing the preparation of valuations. The next indispensable rule in business valuation is from 21 October 2004 and concerns the detailed rules for property valuation and rules and procedures for preparing the appraisal<sup>8</sup>. Valuation standards also govern the National General Valuation Principles and interpretative notes, including the development by the Polish Federation of Associations.

The above-mentioned legal acts do not constitute the full legal regulation of the problems connected with valuations in Poland. More on legislation relating to enterprise valuation can be found in a book by Halina Zadora entitled “Valuation of enterprises in theory and practice”<sup>9</sup>.

The measurement of an enterprise’s value and the choice of a corresponding valuation model also depends heavily on the valuation aim and on the approach to the continuation of the enterprise’s activities. In this paper, analysis is carried out on a few selected practical problems of valuation of enterprises made with the adjusted net asset value method, designed to bridge the gap between theoretical knowledge and the practical application of valuation theory.

## 2. Pricing model – description and assumptions

The term “company’s assets” is understood as wealth resources with specific value reliably under the control of a company resulting from past events that will impact the future economic benefits to a unit. The assets of each economic subject can be divided into two main groups: non-current assets and current assets.

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<sup>5</sup> This method, because of the complexity, is not used in practice. More about this method in W. Rudny, *Opcje rzeczowe w procesie tworzenia wartości przedsiębiorstwa*, Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice 2009 or in S. Benning, E. Tolkowsky, *Real options – an introduction and an application to R&D valuation*, “The Engineering Economist” 2002, vol. 47, no. 2

<sup>6</sup> DzU nr 2 z 1991 r., poz. 10.

<sup>7</sup> DzU, 24 czerwca 1997 r.

<sup>8</sup> DzU nr 207, poz. 2109.

<sup>9</sup> H. Zadora, *op. cit.*, pp. 89-91.

The classification of individual stocks to companies or financial assets determines their nature, duration of use and above all the function that they fulfill in the activities of a unit.

The basic assumption of the adjusted net asset method says that the value of the company determines the market value of net assets it holds. The net assets of the company's book value are equal to a company's equity, i.e. the difference between the book value of all assets owned by the company (its fixed assets and working balances) and all the obligations of the company (long and short-term) as well as provisions for liabilities. The market value of net assets is in turn determined by determining the market value of each item of assets and liabilities according to the formula<sup>10</sup>:

$$W_p = (A + K_A) - (Z_O - K_{Z_o}), \quad (1)$$

where:  $W_p$  – value of a company,

$A$  – carrying value of total assets,

$K_A$  – adjustment ( $\pm$ ) of carrying amount of assets,

$Z_O$  – commitments and provisions for liabilities at book value,

$K_{Z_o}$  – adjustment ( $\pm$ ) of carrying amount of total liabilities.

Correction introductions to the corresponding balance sheet items relative to book value are intended to determine their market value, not eliminating any irregularities that arise during the compilation of the balance. When performing a valuation of a company by the adjusted net assets method, its off-balance sheet resources should also be considered such as significant intangible assets and contingent liabilities, which significantly affect the valuation due to its scale, including any kind of agreement, guarantees, warranties, agreements and potential future reductions of penalties arising from pending litigation.

Under this method of valuation one should also take into account the adjustments resulting from tax liabilities. It should be noted that the value of any adjustment relating to both assets and liabilities should be set at market prices (purchase prices<sup>11</sup>) at fair value or at tax value<sup>12</sup>.

A correction should contain all the assets and liabilities of both the balance sheet and off-balance sheet, which can significantly affect the outcome of a valuation. This level is defined in the same way as in the case of an audit of the financial statements, for example in the amount of 0.5% -2% of total assets, 1% -2% of the equity, or 0.5% -1% of total revenues<sup>13</sup>.

<sup>10</sup> *Fuzje i przejęcia przedsiębiorstwa*, red. W. Frąckowiak, Polskie Wydawnictwo Ekonomiczne, Warszawa 2009, p. 362.

<sup>11</sup> Agreed purchase prices in the market at the date of determination of valuation.

<sup>12</sup> H. Zadora, *op. cit.*, p. 65.

<sup>13</sup> How to determine the level of significance on the financial statements can be found in detail in M. Garstka, *Procedury badania sprawozdań finansowych zgodnie z Międzynarodowymi Standardami Rewizji Finansowej*, CeDeWu Centrum Doradztwa i Wydawnictw, Warszawa 2009 and in the book by K. Winiarski, *Audyty finansowy*, Polskie Wydawnictwo Ekonomiczne, Warszawa 2008.

### 3. Fixed assets

The legal basis for determining the validity of the valuation of intangible assets is clarified by the International Accounting Standard No. 38 'Intangible assets' and the International Financial Reporting Standard No. 3 'Business Combinations'. Depending on their nature, their fair value can be determined by using various valuation methods, including, for example, reconstruction methods and methods of capitalization of the royalty payment<sup>14</sup>, or whether by the excess rate of return<sup>15</sup>. The valuation of tangible assets in the case of real estate and land and technical equipment and machinery is performed based on current estimates of operational indicators<sup>16</sup> drawn up by experts.

In the case of technical equipment, machinery and transport equipment it is possible to determine their value by comparing the prices of similar equipment in a similar condition and having the same aim.

An adjustment that reduces the value of long-term debts is made when there is a risk that they may be non-returnable, for example, if the debtor is under bankruptcy or reorganization proceedings. The adjustment may result from not taking into account e.g. the interest on debt etc. In the case of the valuation of companies using the adjusted net assets in a capital group, long-term investments constitute a very important valuation position. Related companies very often mutually finance in this way the activities of each fund being in a worse financial situation. The most common ways to transfer funds between related companies are bills and bonds. When making a pricing valuation of the company these items should also be corrected, charging the relevant interest if they are not paid to date or reported as an increase in receivables. Additional difficulties in determining the market value of bonds or long-term loan arise when the market value<sup>17</sup> and of the equities of the company issuing the bond (the borrower respectively), scheduled for determining the value of the company being valued, is negative. Therefore it is necessary to make a copy of the correction. The correction of this position should be correlated with the market value of the equity of the issuer (borrower respectively) fixed for the sake of the valuation.

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<sup>14</sup> M. Panfil, *Wycena biznesu w praktyce, metody, przykłady*, Wydawnictwo Poltext, Warszawa 2009, pp. 56-58

<sup>15</sup> More about the methods of valuation of intangible assets, including valuation of the brand can be found in G. Urbanek, *Wycena aktywów niematerialnych przedsiębiorstwa*, Polskie Wydawnictwo Ekonomiczne, Warszawa 2008 and in K. Janas, *Wycena marki w oparciu o preferencje klienta. Ekonomia i zarządzanie w teorii i praktyce*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź 2010.

<sup>16</sup> Current operators estimated it is one that has been made no earlier than 12 months from the date of valuation. Annexes to operators estimates are correct when they were prepared not earlier than within 12 months from the date of valuation, if the estimated operator base, which is its annexes, was not prepared earlier than 24 months from the date of valuation. Detailed rules for the preparation mode and valuations operators are regulated by the Council of Ministers dated 21 September 2004 on detailed rules for property valuation and rules and procedures for preparing the appraisal.

<sup>17</sup> Used in the operation period: the market value of equity in this paper is used to mean the market value determined by the company's adjusted net assets.

Making a copy of the entire value of the bonds (loans<sup>18</sup>) held by the valuated company, depending on the level of the valuation of the issuer/borrower, can make the corrections made to the positions of its obligations<sup>19</sup>, the market value of its equity capital is positive, which thus means that the condition for an adjustment in this position at least partially disappears. An effective method of linking an extract from the market value of equity can be obtained by calculating the correction as a percentage of the negative value of the company from which the bond (a loan) was purchased in total liabilities in issued bonds (borrowing) of the company. In order to illustrate this situation, consider two companies associated with the development industry<sup>20</sup> by a common shareholder's equity, for which an adjustment of the value of bonds in the position for valuation as for 30 June 2011 on the basis of the financial statement as for 31 May 2011. The valued assets of the company<sup>21</sup> and related company on 31 May 2011 shows the balance sheet<sup>22</sup> presented to the company valued respectively in Tables 1 and 2 and a subsidiary in Tables 3 and 4.

**Table 1.** The assets of the company being valued – for example the adjustment of bonds

ASSETS		Up to
		2011-05-31
<b>A.</b>	<b>fixed assets</b>	<b>970 000,00</b>
<b>IV.</b>	<b>long-term investments</b>	<b>970 000,00</b>
3.	Long-term financial assets	970 000,00
<b>B.</b>	<b>Current assets</b>	<b>2 795 687,26</b>
<b>I.</b>	contest	<b>2 157 456,60</b>
<b>II.</b>	<b>short-term receivables</b>	<b>85 724,72</b>
1.	Receivables from affiliates	61,00
2.	Receivables from other entities	85 663,72
<b>III.</b>	<b>short-term investments</b>	<b>552 505,94</b>
1.	Current financial assets	552 505,94
	<b>Total Assets</b>	<b>3 765 687,26</b>

Source: own elaboration based on information from company's accounts.

<sup>18</sup> Unless the loans are adequately secured on the assets of the borrower or if a possible security enforcement can result in additional reductions in the value of the assets constituting collateral. In such cases, an expert must take into account the security level of loans and their value in the event of implementation.

<sup>19</sup> Obligation bonds of the issuer (borrower respectively), in the analyzed case from the standpoint of the valuated company constitutes its assets included under long-term investments.

<sup>20</sup> The registered activity of the two companies involves: building projects related to buildings, works related to construction and non-residential buildings, buying and selling of own real estate, through real estate agents.

<sup>21</sup> Because of the law on art. 280 regarding the entities obliged to observe professional secrecy law on investment funds, this study does not provide the names of companies on the example of which the proposed solutions are illustrated.

<sup>22</sup> In the balance of both companies for better clarity only the nonzero entries are left, leaving the baseline unchanged numbering of all items.

**Table 2.** Liabilities valued the company – such as adjustment of bonds

LIABILITIES		Up to
		2011-05-31
<b>A.</b>	<b>Capital (fund)</b>	<b>3 723 416,89</b>
<b>VI.</b>	<b>Other capital (funds)</b>	<b>1 000,00</b>
<b>VII.</b>	<b>Profit (loss) from previous years</b>	<b>2 649 395,02</b>
<b>VIII.</b>	<b>Profit (loss)</b>	<b>1 023 021,87</b>
<b>B.</b>	<b>Liabilities and provisions for liabilities</b>	<b>42 270,37</b>
<b>III.</b>	<b>Current liabilities</b>	<b>42 270,37</b>
1.	To related affiliates	5 268,09
2.	To other entities	37 002,28
	<b>Total Liabilities</b>	<b>3 765 687,26</b>

Source: own elaboration based on information from company's accounts.

**Table 3.** The assets of a subsidiary – for example the adjustment of bonds

ASSETS		Up to
		2011-05-31
<b>A.</b>	<b>fixed assets</b>	<b>64 682,02</b>
<b>II.</b>	<b>Tangible fixed assets</b>	<b>49 682,02</b>
1.	fixed assets	49 682,02
<b>IV.</b>	<b>long-term investments</b>	<b>15 000,00</b>
3.	Long-term financial assets	15 000,00
<b>B.</b>	<b>Current assets</b>	<b>61 594,07</b>
<b>II.</b>	<b>short-term receivables</b>	<b>10 278,54</b>
1.	Receivables from affiliates	5 083,55
2.	Receivables from other entities	5 194,99
<b>III.</b>	<b>short-term investments</b>	<b>51 315,53</b>
1.	Current financial assets	51 315,53
	<b>Total Assets</b>	<b>126 276,09</b>

Source: own elaboration based on information from company's accounts.

Analysis of the source documents presented by the management of the company being valued and of a related company allowed to establish the market value of the associated company's equity as of 30 June 2011 at the amount of PLN (–) 39,728.46. The amount of adjustment resulted from calculating the interest on bonds for the period from the date of issue up to 30 June 2011<sup>23</sup> at WIBOR 3M on the valuation of

<sup>23</sup> Interest on bonds issued by a related company are booked at the moment of redemption. Interest on bonds is WIBOR 3M on maturity plus a 2% margin.

**Table 4.** Liabilities of the subsidiary – for example the adjustment of bonds

LIABILITIES		Up to
		2011-05-31
<b>A.</b>	<b>Capital (fund)</b>	<b>-35 620,98</b>
<b>I.</b>	<b>Share capital (fund)</b>	<b>50 000,00</b>
<b>VI.</b>	<b>Other capital (funds)</b>	<b>1 000,00</b>
<b>VII.</b>	<b>Profit (loss) from previous years</b>	<b>-38 379,84</b>
<b>VIII.</b>	<b>Profit (loss)</b>	<b>-48 241,14</b>
<b>B.</b>	<b>Liabilities and provisions for liabilities</b>	<b>161 897,07</b>
<b>II.</b>	<b>long-term liabilities</b>	<b>160 000,00</b>
<b>III.</b>	<b>Current liabilities</b>	<b>1 897,07</b>
2.	other entities	1 897,07
	Total Liabilities	126 276,09

Source: own elaboration based on information from company's accounts.

4.69%<sup>24</sup>. The total liabilities of the associated company from the bond issue amounts to PLN 164,107.48<sup>25</sup> (including PLN 15,258.44 against the company valued). As a result, the adjustment of the bonds purchased from a subsidiary is (-) 3,693.89 dollars and was calculated as follows:

$$-39,728.46 \cdot \frac{15,258.44}{164,107.48} = -3,693.89.$$

Thereby calculating the reduction of the long-term investment position of the company being valued is not important because of its size, however, this allows us to illustrate the proposed method to determine the correction and its correlation with the market value of the associated company, as well as its overall level of commitments of the title (bonds or loans).

#### 4. Current assets

When analysing individual items of current assets to determine their market values, as in the case of fixed assets, special attention should be paid to positions constituting a significant share in total assets.

During the identification of the fair value of stocks held by a company, it is necessary to examine both their size and structure. Investigating the use of inventories is usually performed using a turnover rate<sup>26</sup> determined at least for specific categories

<sup>24</sup> <http://www.money.pl/pieniadze/depozyty/zlotowearch/> with date August 2011.

<sup>25</sup> 4,107.48 PLN including interest.

<sup>26</sup> M.R. Tyran, *Wskaźniki finansowe*, Oficyna Ekonomiczna, Kraków 2005, pp. 234-35.

of stocks. The exemplary value of this indicator should be as low as possible. In other words, the rotation of each category / component stocks should be possible as soon as possible. For items of inventory for which over the last year there has been no movement, there should be a careful verification of their usefulness in determining the basis of the knowledge workers of the company and the price compared to market prices. Furthermore, if these stores are the ones used to manufacture products which are no longer being offered by the company and, at the same time, one will not be able to use them for other production processes without some loss of value, they should be valued on the basis of prices offered on the market for a quick sale. In the items of inventory, depending on the accounting policy adopted by the company, one may also include land and property during construction<sup>27</sup>. In this case, the correction for the BSI is to be made like for assets under construction based on an estimate of operational indicators prepared by expert appraisers<sup>28</sup>. For items of short-term receivables from deliveries and services, as in the case of long-term receivables, to determine if an adjustment is to obtain due to the dubious claims. As a measure of determining whether the short-term debt is at stake the aging rate<sup>29</sup> can be used. When the assessed outstanding is significantly past due (this refers often to 90+ past due) and the company's collection (department) or related function does not believe in at least a recovery of the principal debt, an expert should independently verify the chances of its recovery and make reasonable adjustments to the above. For all other balance sheet items that constitute the short-term receivables, there is not a single-track procedure to determine deductions for those items. Therefore, an expert's analysis of the source documents must individually determine the level of adjustment.

Shares constituting the short-term investments of the company which are valued regardless of whether they relate to affiliated or independent companies, should be adjusted to the market value. If the companies whose shares are owned by the valuated company are listed, the market value of those shares shall be the product of the number of shares and the share price determined by the market at the measurement date. Any difference between this amount and the book value is the height adjustment.<sup>30</sup> In the case of other securities, a uniform approach does not apply to loans and other short-term assets for determining the correction. In this case, as for some short-term receivables, an expert position in the light of the source documents should make an adjustment in (sole) discretion. Other cash items are included in

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<sup>27</sup> Such accounting treatment of the land and carried out on their investment may be met by some developers.

<sup>28</sup> More information about property valuation can be found in the work of J. Konowalczyka, *Wycena nieruchomości przedsiębiorstwa*, Wydawnictwo C.H. Beck, Warszawa 2009.

<sup>29</sup> One can read more about the expiration date of claims in the work D. Wędzki, *Analiza wskaźnikowa sprawozdania finansowego: Wskaźniki finansowe Tom 2*, Oficyna a Wolters Kluwer business, Kraków 2009.

<sup>30</sup> This is acceptable if the shares do not constitute a significant item in the balance sheet adjustment based on the book value method based on the last financial statements prepared prior to the date of valuation.



other means of payment including in particular foreign bills of exchange and checks, travel, communications and other documents, payable within three months from the date of issue<sup>31</sup>. For promissory notes held by the valued foreign company, if necessary, an adjustment can be determined in the same way as in the case of bonds. The premise of determining the necessity of making copies of bills for the purchased item is as negative as the bond market value of equity of the company issuing the bill. The level of correction is then determined according to the formula:

$$K_w = RWK \cdot \frac{WWN}{WZW}, \quad (2)$$

where:  $K_w$  – including the adjustment for possession of bills<sup>32</sup>,  
 $RWK$  – the market value of the company issuing the bill, fixed convergent for the same day that determines the value of the company being valued,  
 $WWN$  – the total value of bills purchased by the company valued,  
 $WZW$  – the total value of the issuer's obligations under the promissory notes issued.

In order to illustrate the above methods for determining the market value of promissory notes, consider the position of the two companies engaged in the construction and management of commercial properties and offices that are related

**Table 5.** Valued assets of the company – example of adjustments to bills of exchange

ASSETS		Up to the date of (PLN)
		31.05.2011
<b>A.</b>	<b>Fixed Assets</b>	<b>40 666 857,11</b>
I.	Intangible assets	1 868,97
II.	Tangible fixed assets	3 258 032,16
III.	long-term receivables	0,00
IV.	long-term investments	37 406 955,98
V.	Long-term prepayments	0,00
<b>B.</b>	<b>ASSETS</b>	<b>18 755 771,02</b>
I.	contest	0,00
II.	short-term receivables	526 275,95
III.	short-term investments	18 197 229,96
IV.	Short-term prepayments	32 265,11
	<b>TOTAL ASSETS</b>	<b>59 422 628,13</b>

Source: own elaboration based on information from company's accounts.

<sup>31</sup> A. Kuczyńska-Cesarz, *Rachunkowość cz. I*, Wydawnictwo Difin, Warszawa 2011, pp. 124-127.

<sup>32</sup> Adjustment of bills shall be held separately for each company from which the promissory notes were purchased.

to capital<sup>33</sup>. The source data to determine the value of the company are derived from financial statements prepared on 31 May 2011, the most important items of the report are presented in Table 5 and 6.

**Table 6.** Valued liabilities of the company – example of adjustments to bills of exchange

	LIABILITIES	Up to (PLN)
		31.05.2011
<b>A.</b>	<b>CAPITAL (fund) OWN</b>	<b>29 816 485,84</b>
I.	Capital (fund)	4 403 000,00
II.	Called-up share capital (negative)	0,00
III.	Shares (shares) own (negative)	0,00
IV.	Capital (fund)	14 326 987,06
V.	Capital (fund) from revaluation	8 741 050,00
VI.	Other capital (funds)	66 928,51
VII.	Profit (loss) from previous years	1 501 726,96
VIII.	Profit (loss)	776 793,31
IX.	Deductions from net profit during the financial year (negative)	0,00
<b>B.</b>	<b>LIABILITIES and RESERVES FOR LIABILITIES</b>	<b>29 606 142,29</b>
I.	Provisions for liabilities	0,00
II.	long-term liabilities	0,00
III.	Current liabilities	29 581 181,93
IV.	Accruals	24 960,36
	<b>TOTAL LIABILITIES</b>	<b>59 422 628,13</b>

Source: own elaboration based on information from the company's accounts.

The valued company in the position of equity investments in other cash has, together with accrued interest receivable, the amount of PLN 16,756,205.44 in respect of promissory notes acquired from a subsidiary. The total value of bills of exchange liabilities of the subsidiary on 31 May 2011 amounted to PLN 62,372,662.77. The market value of the subsidiary as for 30 June 2011<sup>34</sup> was determined by experts at the level of (–) 12,068,811.93 PLN. Using formula(2) we find that other cash position should be reduced by the amount of PLN 3,242,245.61.

## 5. Equity and liabilities

Movements in the equity of the company are almost always the consequence of placing copies of items valued assets or liabilities of the company. If the entered correction relates to assets or liabilities, this adjustment is recognized in the position

<sup>33</sup> The companies taken into consideration are related to capital by a shareholder.

<sup>34</sup> The day determining the value of the company valued.

of capital (funds) from revaluation<sup>35</sup>. If the assets are adjusted, the capital (funds) from revaluation changes by the same amount as an asset. The adjustment to long-term commitments preserves the so-called balance equation<sup>36</sup> (the equivalent of the balance sheet<sup>37</sup>) shown under the heading of capital (funds) from a revaluation of the same amount but with the opposite sign. The change in the values of assets and liabilities is recognized in the equity in the company's valued position of profit (losses), net. Similarly as before, the adjustment of assets in the position of profit (loss) is recognized in the same amount. In turn, for short-term liabilities, the same value but of the opposite sign. Experts, in specific cases, may depart from this rule to put the correction in the current assets of equity (funds) from revaluation. Failure to comply with the accounting procedures in the previously described changes in equity shall not affect in any way the final appraised value of the company, and is purely presentational.

The derogation may occur, for example, for accounting adjustments made for bringing to the market value of positions valued bills acquired by the company, reported in other cash. The basis for a new approach by making changes in equity of the company being valued can be documented by the fact that these bills are renewed annually at the same denomination (possibly extended to accrued interest). As a result, although each bill due to its nature should be included in measures of short-term financial investments, it is a longer time horizon and may be treated as long-term investment. It should be emphasized again that such a change is merely presentational, and does not affect the level of the final valuation of the company.

Experts using the adjusted net asset method to determine the value of limited partnerships often do not include valuation adjustments resulting from the general partner's share in the distribution of profit. The amount of profit attributable to the 'komplementariusz' of limited partnership or of a limited joint-stock company established under the contract. A copy of the declining value of the company being valued in this respect should be made whenever the company found that the general partner participates in the distribution of profit as a percentage. If the general partner does not participate in the profits of the company, and for representing the company is entitled to only a predetermined salary, generally there is no need for a reduction of this title in accordance with the principle of materiality. Height adjustment is determined as the product of the general partner share in the distribution of profit of the company being valued and the market value of the company.

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<sup>35</sup> V position in the balance sheet in accordance with the Accounting Act dated 29 September 1994.

<sup>36</sup> This principle says that for every company, regardless of the number of operations performed, its total amount of assets (assets) must always be equal to the total amount of liabilities (sources of financing).

<sup>37</sup> E. Walińska, *Rachunkowość finansowa*, Oficyna Ekonomiczna Grupa Wolters Kluwer, Warszawa 2010, p. 96.

As an example, let us examine how to determine the adjustment in the valuation of companies in real estate, which is a closed-end mutual fund investment. XYZ company priced has 22.41 million shares of a limited joint-stock company ABC<sup>38</sup> from all 22,550,000 shares, i.e. having 99.38% shareholding close. The value of the shares, which are a long-term investment, in the books of the company X on 31 May 2011 amounts to PLN 22,541,241.00. The market value of 100% shares of the company on the date of valuation of company XYZ has been determined by an expert at EUR 43,492,943.66. ABC's general partner in the company participates in the division of profits of 4.00%. Therefore, the correction value of the shares of the subsidiary owned by company XYZ is PLN 18,941,962.20 according to the following calculations:

$$43,492,943.66 \cdot (99.38\% - 4\%) - 22,541,241.00 = 18,941,962.20$$

the amount of the increased entry of shares in the long-term investment position and the liability side of the capital (fund) from revaluation.

Adjustments to liabilities positions, both long and short-term, shall be required for charging interest on the measurement date, which, due to the nature of the instrument are not paid or accrued to date. An example of such a financial instrument may be bonds or bills on time over 12 months of purchase for which interest is calculated only at maturity. A similar situation may occur in cases of making adjustments to liabilities. Increasing the level of current liabilities may also be necessary if the valuated company does not regulate within the commitments for supplies and services. In this case, one has to increase the amount of accrued interest on arrears to the position of other liabilities, and reduce by the amount of profit (loss) realized by the company valued.

## 6. Conclusion

The adjusted net asset method, having an ensured adequate level of precision, constitutes a reliable estimate of the market value of assets held by an enterprise<sup>39</sup>. An undeniable advantage of this approach is its formalism due to the uniqueness of the assumptions and procedures for determining the partial adjustments that make up the final valuation of the company as a whole. An important advantage of the method of adjusted net assets is the fact that each input adjustment is justified according to the source documents and the current economic and market price levels.

The considerable advantage of the adjusted net asset method over other valuation methods is taken into account by the actual ambient condition, and not forecasts of

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<sup>38</sup> Because of the law in art. 280 concerning the entities obliged to observe professional secrecy law on investment funds, this study does not provide the names of companies, which shows examples of the proposed solutions.

<sup>39</sup> M. Panfil *op. cit.*, p. 37.

development (income method), or the relationship of economic (market-based methods), which may be subject to error and uncertainty and are characterized by a high sensitivity to change in individual assumptions.

The main disadvantage of this approach may be the presence of errors resulting from the estimation of the real value of assets (especially of intangible assets and fixed assets). The emergence of such a revaluation consists of many factors including mainly the difficult-to-estimate price of fixed assets and the cost of their purchase<sup>40</sup>, the different methods and depreciation rates, delays in the revaluation of the funds resulting from the dynamic changes in market prices. This method does not incorporate the company's growth opportunities and the related increase of its value. It does not take into account the degree of effectiveness of the company being valued, that is the degree of exploitation of their assets and the means of its further development.

Despite the disadvantages, the adjusted net asset method is one of the most frequently used methods for determining the value of a company, and the accuracy of the result obtained using its methodology depends largely on the experience of the expert and the scope and detail of information collected about the company in question. The practical application of all the theoretical aspects of the method of adjusted net assets, depending on the complexity of the company's capital structure, may be valued but difficult. The above approach of specifying the method to determine the market value of each balance sheet item shows how to implement the recommendations of the legal and theoretical training in specific situations. All the work presented in the examples discussed ways of determining the level of correction was in fact used to determine the estimated value of the certificates of several closed Polish investment funds. The presented method of determining the amount of adjustments, especially for other funds, unlisted joint stock companies and bonds was approved by the Polish Financial Supervision Authority and reviewed and approved by independent auditors, thus it can be successfully and confidently applied in the valuation of a company by the adjusted net asset method.

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<sup>40</sup> This remark particularly applies to old funds operating for a longer period.

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## STUDIUM PRZYPADKÓW WYCEN PRZEDSIĘBIORSTW METODĄ SKORYGOWANYCH AKTYWÓW NETTO

**Streszczenie:** Celem niniejszego artykułu jest uzupełnienie przestrzeni między teoretycznym a praktycznym podejściem do wyceny przedsiębiorstw metodą skorygowanych aktywów netto. Połączenie zasad prawnych oraz zaleceń teoretycznych, jak ustalać korekty poszczególnych pozycji bilansowych wycenianej spółki, z przykładami z polskiego rynku kapitałowego pozwala czytelnikowi znającemu zasady rachunkowości dokonać samemu wyceny spółki prezentowaną metodą. Proponowane przez autora sposoby określania korekt, szczególnie dla innych środków pieniężnych, nienotowanych spółek akcyjnych i obligacji ze względu na akceptację niezależnego biegłego rewidenta i Komisję Nadzoru Finansowego, dają z kolei pewność, że przygotowana w ten sposób wycena jest prawidłowa.

**Słowa kluczowe:** wycena przedsiębiorstwa, aktywa netto, kapitały własne, zobowiązania.