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ISSUES RELATING TO GOODWILL VALUATION: EVIDENCE FROM COMPANIES IN FEDERATION OF BOSNIA AND HERZEGOVINA

According to both theoretical and empirical research results, this paper has the aim to determine, the extent to which the current accounting regulatory framework (IFRS 3 and IAS 36) offers an adequate basis for correct valuation of goodwill. We have researched all the available critical reviews of the accounting treatment of goodwill and the quality of applying accounting regulations onto expression of the goodwill position in BH companies' practices. The empirical research was conducted on all the companies in the Federation of Bosnia and Herzegovina (FBiH), which recorded goodwill in their balance sheets in the period from 2013 to 2018. The research results have shown a high level of subjectivity in the process of determining the value of goodwill, and great discrepancies in adhering to the accounting regulations in the part of additional valuation and expression of goodwill value in financial reports. This resulted in the fact that the share of companies in FBiH which express decreased values of goodwill is far greater than the share of companies in the European union (EU).

The main contribution of this paper is the fact that this is the first comprehensive research on evaluation of goodwill in FBiH companies in comparison to the situation in the EU. Also, it confirms the Agency Theory and

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shows great subjectivity in evaluation which results in an unjustified expression of a higher operative success in financial reports.

Keywords: accounting for goodwill, goodwill impairment, FBiH

1. INTRODUCTION

According to the current accounting regulatory framework, the International Financial Reporting Standards – IFRS and the International Accounting Standards – IAS, the greatest controversy is connected to the balance position of goodwill. Goodwill is recognized in accordance with the regulations of the IFRS 3 – Business Combinations. The initial recognition of goodwill as an asset gained in a business combination during a status change, is sometimes performed per its purchase price. Its purchase price represents the difference between the cost of business combination and the acquirer's share in the net fair value of recognizable assets, liabilities and potential liabilities. After the initial recognition, the acquirer evaluates goodwill acquired in a business combination by its purchase price minus the accumulated loss from the decrease in value. In other words, the subsequent valuation of goodwill is performed in accordance with IAS 36 – Impairment of Assets. Goodwill write-off through depreciation is allowed only for companies that apply the IFRS for Small and Medium-sized Entities in the period of 10 years. On the other hand, goodwill is depreciated in the period not shorter than 5 years and not longer than 10 years, as regulated by the EU directive 2013/34. Negative goodwill implies a bargain purchase and the acquirer immediately records an extraordinary gain on its income statement.

However, it seems that the accounting regulatory framework sets a thorough accounting treatment of goodwill. In practice, valuation of goodwill imposes a problem and there are numerous controversies related to it.

2. LITERATURE REVIEW

2.1. *Controversies relating to goodwill recognition*

Goodwill is a framework asset that occurs as a difference between the paid value and the acquirer's share in a net fair value of assets, liabilities and potential liabilities of the legal entity. Even though the IFRS requires recognition of such dif-

ference in the assets through the position of goodwill, this balance sheet position is questionable according to the definition of framework assets and their regulations according to IAS 38. Some authors consider that it cannot be considered and recognized as an asset, for as long as it is referential, it is not separable and it is identified as a rest. Goodwill generates future economic benefits because it has the ability to create cash flows together with other assets and a legal entity controls these advantages (Munteanu, V., Tinta, A., Andrei A. E., Vatasoiu, C. I., 2012). In other words, the anticipated future economic benefits could not be directly attributed to goodwill, especially due to the fact that the internally-generated goodwill essentially links itself to the same anticipated future economic benefits. However, the internally-generated goodwill is not allowed to be recognized as a company's asset. In comparison to the goodwill acquired through business combinations, costs of assets of the internally-generated goodwill are not possible to be reliably measured. Therefore, the International Accounting Standards neglect its existence. On the other side, goodwill fulfils the definition of a framework asset according to IAS 38, paragraph 12. B: *arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations*. The critique that goodwill may not independently generate future economic benefits apart from other balance positions is overridden by the requirement of the accounting standard 36 that goodwill is allocated onto "units that generate cash". However, the identification of a cash-generating unit could be difficult in cases where a company has acquired another company and the latter consists of a number of separate subsidiaries or branches (Dagvel, R., Windsor, C., Wines, G.).

Studies show that the goodwill part in the purchased price fluctuates from 36% to 70.4% depending on the industry (KPMG, 2009). Also, studies show that there is a number of experts (approximately 32%) who believe that financial reports would be much more reliable if goodwill would not be recognized as an asset, but as a cost of purchase (Tretyakov, I., 2013).

2.2. Controversies related to the subsequent valuation of goodwill

According to the IAS 36, long-term fixed assets are tested on depreciation once a year. Their recoverable value is determined and it is greater than the following two values: the fair value decreased by the sales cost or value of assets in use. In this process of value testing, only goodwill represents an asset upon which it is not possible to conduct the usual tests.

Valuation of goodwill is completely under the influence of the company's future predictions, through predictions of future cash flows (most often five-year

long predictions) and through determination of the discount rate. Therefore, goodwill value depends on what a company believes in when its future cash flow is in question. Studies show that 83% of companies in Belgium have opted to determine the recoverable amount of their cash-generating units on the basis of the value in use (FSMA, 2012). In Great Britain, 65% of companies use “value in use”, while 34% of companies use “fair value less cost to sell” to estimate the recoverable amount of goodwill (Camodeca, R., Almici, A., Bernardi, M., 2013).

A company is forced, according to the IAS 36, to start with the assumption in valuation (Munteanu, V., Tinta, A., Andrei A. E., Vatasoiu, C. I., 2012). This is exactly where the Agency Theory is emphasized. Namely, if a company’s management has a direct impact on determination of goodwill value, they will try to make its impairment as low as possible in order for it not have a negative effect on the financial success (Ramanna, K., Watts, R. L., 2011; Korošec, B., Jerman, M., Tominc, P., 2016). In this way, they have a direct impact on the perception of the interested parties about the operative success of a company. Therefore, we may conclude that current accounting regulations leave a large space for financial fraud.

When subsequent valuation of goodwill is in question, besides the problem of subjectivity, we may focus on two more issues. The first one is the impairment losses of goodwill that have not been recognized in a timely manner (KPMG, 2014; IFRS Foundation 2014). The second issue is the late recognition of the impairment losses which temporarily overstates goodwill presented on the financial statements (EFRAG, 2016).

Some experts sustain that the value of goodwill does not decrease in time, but, on the contrary, maintains its value or even grows during its economic life. Some specialists plead for the necessity of depreciating goodwill, due to its elements of economic nature. Therefore, goodwill may contain framework assets that support depreciation, and are not separately identifiable, because their cost cannot be reliably determined (Munteanu, V., Tinta, A., Andrei A. E., Vatasoiu, C. I., 2012). Studies show that there is a significant share of accounting experts (approximately 40%) who believe that goodwill should be decreased proportionally to profits from the related company (Tretyakov, I., 2013). Some studies show that the depreciation of goodwill value would much better correlate to market value of listed companies, and that it is a cheaper method of valuation (Peristeris, K., 2016).

The issue of subsequent valuation of goodwill is greater if the value of balance position of goodwill is large. Also, objectivity in goodwill valuation is significantly smaller if a company is not a joint-stock company, and its stocks are not on the market. In this case, there is no objective indicator of a fair market value of the company.

The issue of goodwill valuation and controversies related to goodwill have been present since 1890s until today in all current regulations of its accounting

treatment in different parts of the world (Seetharaman, A., Balachandran, M., Saravanan, A. S., 2004).

2.3. Disclosure of goodwill impairment

Abdul Majid (2013), in his Ph.D. thesis, has established the existence of a large number of listed companies in Malaysia, which did not have any changes in goodwill values in the period from 2008 to 2010 (76% in 2008, 81% in 2009 and 77% in 2010) despite the fact that the country was experiencing a great impact of the financial crisis in the first quarter of 2009. In a study conducted by Paul Andre, Andrei Filip and Luc Paugam (2016), it was shown that European firms reported significantly smaller proportion of goodwill impairment losses relative to goodwill balance (6% in 2008 and 7% in 2009) than the US firms (63% in 2008 and 40% in 2009), despite the great economic crisis.

Duff and Phelps, in a study called „2018 European Goodwill Impairment Study“, Duff and Phelps conducted a thorough research about impairment of goodwill value, on a sample of companies that were in the STOXX Europe 600 Index, which is comprised of large, medium and small private companies in just under 20 countries in the European region. The research results show that goodwill impairment dropped from €28.4 billion in 2016, to €18.5 billion in 2017, that is, by 35%. The study points to the fact that this has been the lowest level of aggregate goodwill impairment for the STOXX Europe 600 since 2010. The number of goodwill impairment events fell by 9%, from 121 in 2016 to 110 in 2017.

Duff and Phelps conducted the same study in the United States of America, under the title „2018 U.S. Goodwill Impairment Study“. This study examined general and industry goodwill impairment trends of 8,400+ U.S. publicly traded companies through December 2017. Total goodwill impairment (GWI) recorded by the U.S. public companies rose from \$29 billion in 2016 to \$35.1 billion in 2017 (growth by 23%), despite a strengthening global economy. However, the number of GWI events was increased only marginally, from 288 in 2016 to 293 in 2017. This implies that the magnitude of impairments has generally become larger, with the average GWI per event rising by 21% in 2017, to \$120 million.

In another study on the influence of goodwill value impairment on the market value of company shares (Gonçalves, C., Rebbelo, E., Ferreira, L., Fernandes, S., 2017), it was confirmed that goodwill value impairment directly influenced the investors' perception of the company's anticipated decrease of future economic benefits. The consequence of this occurrence was a decrease in the market price of stocks. Studies have also shown that the decision on goodwill value impairment

most often came from changes in the management structure of a company (CEO), and as the result of the anticipated financial crises (Malijebtou, Hassine, N., Jilani, F., 2017). Also, common reasons for goodwill value impairment were unexpectedly low income and financial results.

3. RESEARCH GOALS

Research goals of this paper may be summarized as follows:

1. To determine, based on the observed activity sectors:
 - The number of companies that have goodwill as a recorded balance position,
 - The average value of goodwill, and
 - Relative values of goodwill observed in comparison to framework assets value and business assets value;
2. To determine how realistic the presented goodwill value in FBiH companies is;
3. To prove or disprove the existence of incorrect recording of the replaceable value of goodwill (that is, "Agency Theory") in the observed sample of FBiH companies;
4. To determine the deviation from the average impairment of goodwill value in FBiH in comparison to the average value of goodwill impairment in the EU;
5. To determine the way in which FBiH companies decide on the replaceable value of goodwill; and
6. To determine the level of subjectivity when subsequently valuating goodwill in FBiH companies.

4. RESEARCH METHODOLOGY AND SAMPLE

We took the following data on population of legal entities in FBiH from the Financial-Information Agency – FIA Sarajevo, for they held the position of goodwill in the period from 2013 and 2018. FIA is a government agency which collects financial reports for all legal entities located in FBiH. The sample on which this research was conducted equals the whole population, which is why the research results have the highest level of representativeness (Table 1).

Table 1.

RESEARCH POPULATION AND SAMPLE N=N

Description	2013		2014		2015		2016		2017		2018	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
A	2	3.57	3	5.56	4	7.84	2	3.23	3	5.77	3	6.00
B	0	0.00	0	0.00	1	1.96	1	1.61	1	1.92	1	2.00
C	15	26.79	12	22.22	10	19.61	14	22.58	6	11.54	6	12.00
D	0	0.00	0	0.00	2	3.92	2	3.23	4	7.69	4	8.00
E	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00
F	4	7.14	4	7.41	3	5.88	5	8.06	5	9.62	4	8.00
G	19	33.93	12	22.22	13	25.49	14	22.58	11	21.15	10	20.00
H	3	5.36	7	12.96	7	13.73	7	11.29	6	11.54	6	12.00
I	0	0.00	0	0.00	0	0.00	3	4.84	2	3.85	2	4.00
J	2	3.57	4	7.41	1	1.96	1	1.61	2	3.85	2	4.00
K	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
L	2	3.57	1	1.85	3	5.88	3	4.84	2	3.85	2	4.00
M	4	7.14	6	11.11	3	5.88	4	6.45	3	5.77	3	6.00
N	1	1.79	2	3.70	1	1.96	1	1.61	1	1.92	1	2.00
O	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
P	0	0.00	0	0.00	0	0.00	1	1.61	1	1.92	1	2.00
Q	1	1.79	1	1.85	1	1.96	1	1.61	3	5.77	3	6.00
R	1	1.79	1	1.85	1	1.96	1	1.61	1	1.92	1	2.00
S	2	3.57	1	1.85	1	1.96	1	1.61	1	1.92	1	2.00
T	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
U	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL	56	100.00	54	100.00	51	100.00	62	100.00	52	100.00	50	100.00

A-Agriculture, forestry, fishing; B-Mining and quarrying; C-Manufacturing; D-Production and supply of electricity, gas, steam and air conditioning; E-Water supply; sewage disposal, waste management and environmental remediation activities; F-Construction; G-Wholesale and retail trade, repair of motor vehicles and motorcycles; H-Transport and storage; I-Hotel and Catering; J-Information and Communications; K-Financial and insurance activities; L-Real estate business; M-Professional, scientific and technical activities; N-Administrative and support service activities; O-Public administration and defence, social security; P-Education; Q-Health and social work activities; R-Arts, Entertainment and Recreation; S-Other service activities; T-Activities of households as employers, activities of households producing different goods and providing different services for their own needs; U-Activities of extraterritorial organizations and bodies. The data were purchased in March 2018 and it is possible that not all the financial statements for 2018 were entered in the FIA electronic database.

Upon completing the collection of the secondary data which referred to goodwill values, intangible goods, business assets and capital for the period from 2013 to 2018, we approached the primary research. The primary research was conducted through a survey of accountants in companies from the sample. It was necessary that the primary research completed research goals 5 and 6. There were a total of twenty eight (28) correctly filled questionnaires. The reply rate was between 45% and 56%, depending on the year in which we observed the population. The structure of respondents was as follows: 17 accountants, 6 auditors, 4 internal auditors and a financial controller.

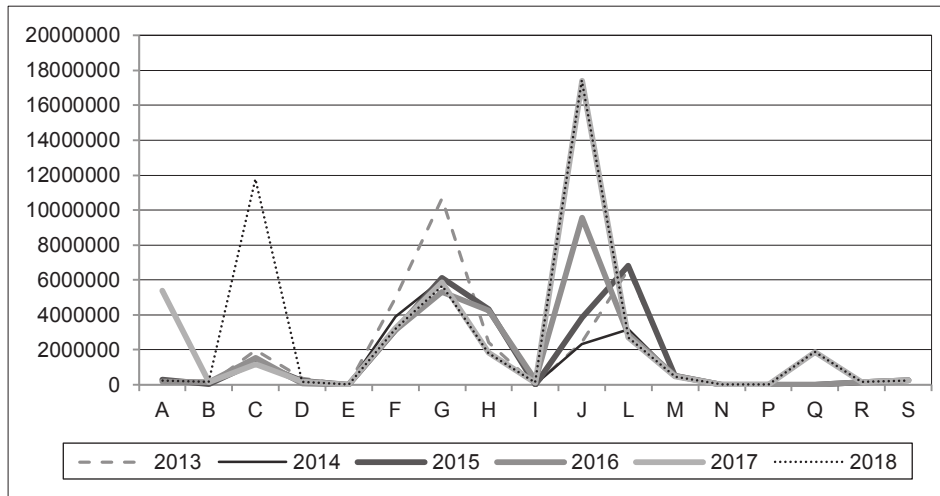
5. RESEARCH RESULTS

The activities in which we recorded most business combinations and which resulted in the recognition of goodwill balance position are the following: trade (79), manufacturing (63), and transportation and storage (36), respectively. In the observed period of 6 years, a positive value of goodwill was not recorded in the following sectors: finance and insurance, public administration and defence, household and extra-territorial bodies.

The total value of goodwill, observed through all activity sectors, in the period from 2013 to 2018, amounted to: 30.54 million, 22.18 million, 26.97 million, 28.31 million, 40.77 million and 46.05 million, respectively. In Image 1, we may see the movement of the total value of goodwill by years and by activity sectors. We may notice that goodwill value was the greatest in sectors J (17.41 million) and sector C (11.77 million) in 2018. The share of these two sectors in the total value of goodwill for 2018 was 63.38%. During 2017, goodwill value was the highest in sectors J (17.41 million), sector G (5.86 million), sector A (5.37 million) and sector L (2.71 million). The share of the mentioned sectors in the total value of goodwill for 2017 amounted to 76.89%.

Image 1.

MOVEMENT OF THE TOTAL VALUE OF GOODWILL
 BY ACTIVITY SECTORS (2013-2018)



Source: Author research

In Table 2, we may see the movement of the average goodwill value in companies by the activity type, the total pondered average goodwill value, standard deviation, and minimum and maximum average value by activities. The greatest pondered average goodwill value is seen in the following sectors: information and communications, real-estate and construction, respectively.

Table 2.

AVERAGE VALUE OF GOODWILL

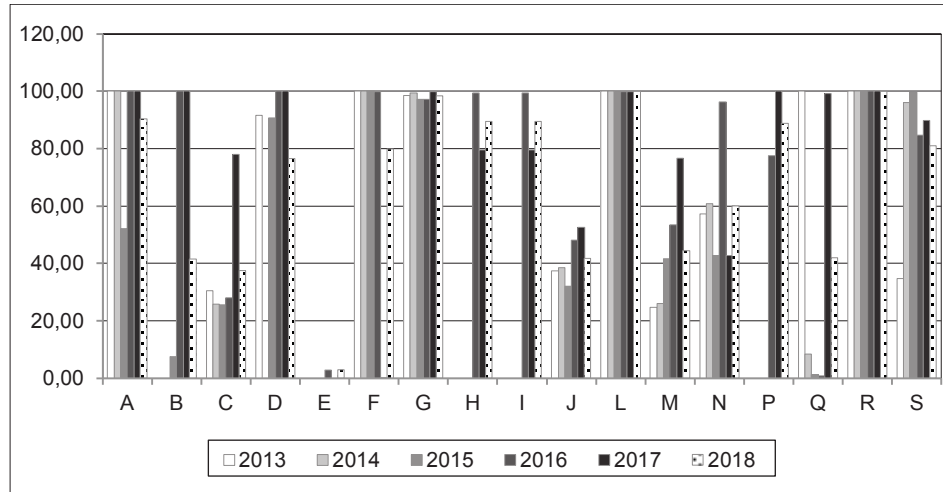
Sec.	Average value of goodwill									
	2013	2014	2015	2016	2017	2018	AVRAGE	STDEVA	MAX	MIN
A	86510	74958	68728	86510	81006	81006	79786	6914	86510	68728
B	0	0	23129	154172	154172	154172	80941	80664	154172	23129
C	131494	110226	127347	109967	195095	195095	144871	39874	195095	109967
D	187235	0	108452	32913	45456	45456	69919	67384	187235	32913
E	0	0	0	9470	0	0	1578	3866	9470	9470
F	1238025	974441	1039865	624094	643365	802869	887110	240744	1238025	624094
G	561338	501804	471992	380499	532454	514803	493815	63045	561338	380499
H	808023	613373	616515	605135	304147	304147	541890	199273	808023	304147
I	0	0	0	87454	61119	61119	34949	39474	87454	61119
J	1230639	581234	3852231	9583691	8706744	30560	3997516	4206343	9583691	30560
L	3298818	3175466	2270910	966339	1354712	1354712	2070159	1001375	3298818	966339
M	121381	83935	176697	128816	153488	153488	136301	32383	176697	83935
N	5411	3147	4038	7548	4038	4038	4703	1571	7548	3147
P	0	0	0	5181	7733	7733	3441	3883	7733	5181
Q	14465	102	101	102	623935	623935	210440	320340	623935	101
R	151730	151730	151730	151730	151730	151730	151730	0	151730	151730
S	133734	256350	256350	256350	256350	256350	235914	50058	256350	133734

Source: Author research

The share of goodwill value in the total value of framework fixed assets (Image 2) in the sample is 68.48%, with a standard deviation of 28.56%. We may observe that in a large number of activities by individual years, the value of goodwill has a total value of intangible fixed assets (the share is 100%).

Image 2.

SHARE OF GOODWILL IN VALUE OF INTANGIBLE FIXED ASSETS

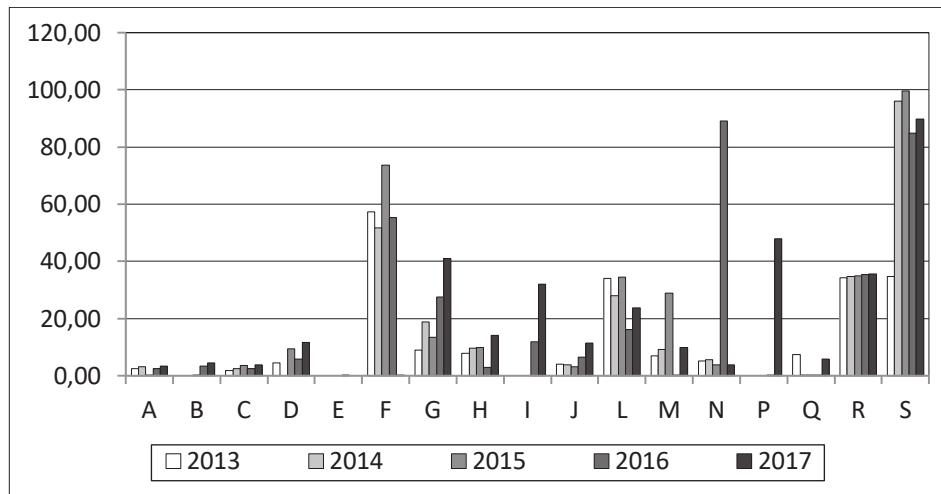


Source: Author research

A much greater variability is noticed in the share of goodwill value in the total value of business assets of companies (Image 3). If we observe the average value of share per activity sectors, the greatest percentage share is in the following sectors: F (average = 47.63%, stdev = 12.64%), L (average = 27.25%, stdev = 10.68%), I (average = 22.03%, stdev = 3.41%) and G (average = 21.91%, stdev = 4.04%).

Image 3.

SHARE OF GOODWILL IN THE VALUE OF BUSINESS ASSETS



Source: Author research

The first research goal provides us with an insight into a factual state when we observe the companies which have a recorded goodwill position. However, the number of companies is not large, and the fact that there is a record of the value of goodwill balance position is actually significant. It implies that the way of goodwill valuation may have significant effect onto an operative result of a company. Therefore, we will establish the scope within which the presented goodwill value is realistic through the second research goal.

In the sample, there are three groups of companies, according to the approach that they take to value goodwill (Table 3). We may notice that there is a large number of companies in the sample which constantly have the same value of goodwill recorded in a 6-year period. Also, a significant share of the companies treat goodwill in a way that in the first year after its initial recognition, they completely write-off the value of goodwill. And, prior to this, goodwill had not been a subject to impairment of value. Considering this, we have situations where certain companies (without previous impairment in value) write-off the following values: 2,412,219 KM goodwill value (sector H), 749,806 KM (sector G), 618,823 KM (sector C), 373,248 KM (sector D), and such. Such approach to valuation of goodwill points to its inadequate accounting treatment in a balance sheet. Also,

this results in an unjustifiably large impairment of the recorded value of operative result, as well as in a changed position of capital in the year of the write-off.

Table 3.

VALUATION OF GOODWILL

DESCRIPTION	2014/2013		2015/2014		2016/2015		2017/2016		2018/2017	
Same value of goodwill	25	44.64	25	46.30	22	43.14	20	32.26	22	42.31
Write-off of goodwill in total after recognition (without previous impairments of value)	26	46.43	9	16.67	10	19.61	11	17.74	2	3.85
Impairment of value (*)	5	8.93	20	37.037	19	37.25	31	50.00	28	53.85
Total	56	100.00	54	100.00	51	100.00	62	100.00	52	100.00

(*) One company from sector J had three business combinations in the observed period, and according to that, had three increases in goodwill value. The goodwill value in the given company has been impaired in the years after acquisition of other entities.

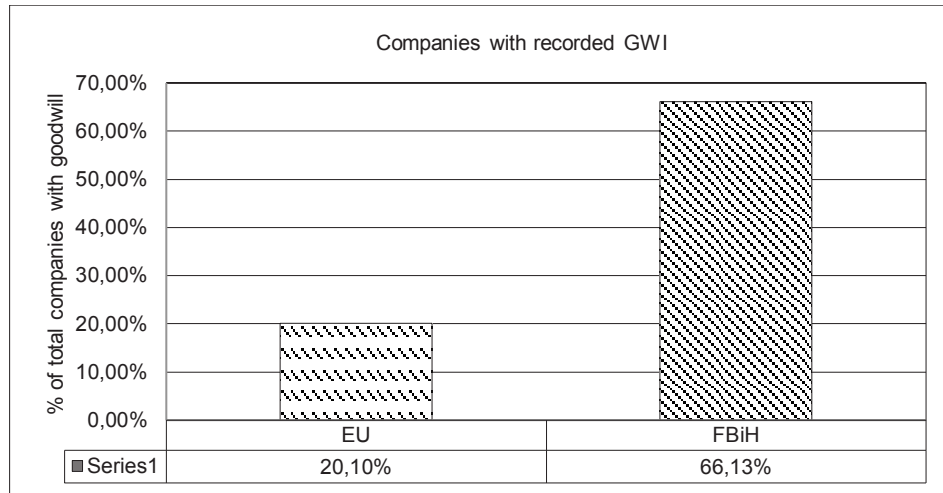
Source: Author research

It is interesting to compare the percentage share of companies in the EU which have a registered impairment of goodwill value in comparison to the percentage share in the FBiH, observed according to the value in 2017 in comparison to 2016 (Research goal 4, Image 4). For example, goodwill value impairment in sector C for the EU was 18.80%, while for the FBiH, it was 50%; in sectors K and L, the sum for the EU was 2560%, while for the FBiH, it was 33.33%; in sector E, for the EU, it was 30.40%, while for the FBiH there were no registered impairments;. The average impairment value of goodwill for all sectors in the EU was 20.10%, while in the FBiH, it was 66.13%.

The reason why a large number of companies in the FBiH have registered impairment of goodwill value is that these companies have written-off goodwill from their balance sheets immediately in the following fiscal year (53 companies in the sample for the whole observed time period).

Image 4.

NUMBER OF COMPANIES WITH GWI – COMPARISON EU VS. FBiH
(2017 IN COMPARISON TO 2016)



Source: Duff & Phelps, „2018 European Goodwill Impairment Study”

In order to test the validity of a constant recording of the same goodwill value in certain companies in the sample, we conducted a correlation and regression test in relation to the recorded value of capital and business assets. Namely, a decrease in the value of capital and business assets in a year (n+1) in comparison to year n, should lead to a decrease of goodwill value in the year (n+1). Therefore, in the tested model, we have two independent variables: the value of capital and the value of business assets (which are tested separately), while goodwill value is a dependent variable.

Table 4 shows the results of the Spearman's rank correlation analysis between the values of goodwill on the one hand, and the values of capital and business assets on the other hand. The realized values of the Spearman's correlation lead to the conclusion that there is a medium-strong positive rank correlation between goodwill value and business assets value of a company ($\rho = 0,496$, $p < 0,060$, $n = 15$), as well as the company's capital ($\rho = 0,434$, $p < 0,138$, $n = 13$). Based on the height of the correlation coefficient, we may conclude that the decrease in business assets value of a company, as well as the decrease in capital value of the company, will be followed by the decrease in the value of goodwill. These correlations did

not reach statistical significance with a small sample of companies the value of which remained unchanged during 6 years (n=13 and 15). Therefore, these conclusions require additional confirmation.

Table 4.

CONNECTION OF GOODWILL WITH CAPITAL AND BUSINESS ASSETS
 OF COMPANIES (DATABASE, 2013)

		Capital	Business assets
Goodwill	Spearman's Correlation	0.434	0.496
	p	0.138	0.060
	n	13	15

Source: Author research

Two separate linear regression models are used to estimate the variability of goodwill based on the variability of business assets and capital of a company with the aim of proving the hypothesis that the amount of goodwill of a company is dependent on the previously designated independent variables. Considering the fact that the variables (goodwill, business assets and capital) were very asymmetric and contained extreme values (Outliers), we conducted their transformation with a logarithm and thus stabilized the distribution of values that were adequate for the linear regression model.

Representativeness of set regression models is presented in Tables 5 and 6. The received coefficient of determination realized with business assets amounts to 0.239, which practically means that the variation of the business assets of a company explains about 24% of the recorded value of goodwill. With influence of capital on goodwill in a separate regression model, the coefficient of determination is lower (14.4%). It is good to mention that the models did not reach statistical significance with a smaller number of companies in a sample. Therefore, these conclusions require additional confirmation.

Table 5.

REPRESENTATIVENESS OF THE REGRESSION MODEL WITH AN
INDEPENDENT VARIABLE – BUSINESS ASSETS

R	R Square	Std. Error	F	P
0.489	0.239	0.872	4.086	0.064

R- multiple linear correlation coefficient, **R Square**- determination coefficient of the variance, **F**- F test value, **p** –probability of disproving the zero hypothesis

Source: Author research

Table 6.

REPRESENTATIVENESS OF THE REGRESSION MODEL WITH AN
INDEPENDENT VARIABLE - CAPITAL

R	R Square	Std. Error	F	P
0.379	0.144	0.93	1.844	0.202

R- multiple linear correlation coefficient, **R Square**- determination coefficient of the variance, **F**- F test value, **p** – probability of disproving the zero hypothesis

Source: Author research

Based on the conducted analysis, we may conclude that over 76% of companies should have an impaired value of goodwill, if we observe the change in values of business assets. On the other hand, over 85.60% of companies in the sample should have an impaired value of goodwill, if we observe the movement of the value of capital. Recording a constant value of goodwill, without impairment, was not justified in most cases. This fact proves the accuracy of the Agency Theory, that is, proves that there is a great deal of subjectivity and/or purposeful incorrect recording of goodwill with the aim to prevent negative effects on operative results (Research goal 3). It is thus important to emphasize that the observed companies in the sample that had the same value of goodwill during a longer period, had an average value of goodwill as follows: 378755 KM (for the period 2013-2014), 360318 (for 2015), and 348865 (for the period 2016-2018). The maximum recorded value of goodwill in the observed sample amounted to 3.4 million.

Questioning the approach used in companies in the FBiH when valuating recoverable goodwill value (Research goal 5), we have come up with the results that

are summarized in the following table (Table 7). It is evident that, in most cases, companies choose a simpler, but much more subjective approach to determine the value of assets in use for units that generate money, that is, which the goodwill was allocated to. The estimate is done by discounting the predicted future cash flows onto the present moment, with a discount rate which is also subject to prediction. In most cases, auditors or experts for value estimation are engaged for the estimation of goodwill value.

Table 7.

THE WAY TO DETERMINE THE RECOVERABLE VALUE OF GOODWILL

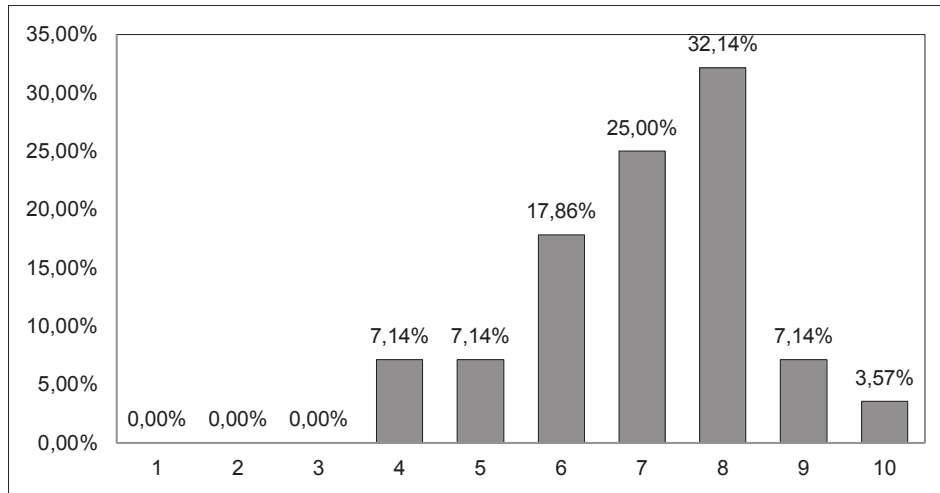
DESCRIPTION	Number	%
Determining the “value of assets in use” for units that generate money	19	67.86
Determining market value less sale costs of units that generate money	2	7.14
Not known	7	25.00
Total	28	100.00

Source: Author research

The respondents gave their opinions on the level of subjectivity when determining goodwill value in the subsequent valuation, grading it on the Likert’s scale (from 1 – no subjectivity to 10 – the highest level of subjectivity). The average grade for the subjectivity level amounted to 7.035 with a standard deviation value of 1.45 (Image 5).

Image 5.

RESPONDENTS' OPINION ON THE LEVEL OF SUBJECTIVITY WHEN
DETERMINING GOODWILL VALUE SUBSEQUENTLY



Source: Author research

It is important to emphasize that the grade on subjectivity level, in most cases, did not come from experts who were engaged at the estimation, but from accountants within companies who had a recorded position of goodwill.

6. CONCLUSION

The research results show that the existing accounting regulations (primarily, IFRS 3 and IAS 36) provide too much freedom to companies when valuating goodwill. In the FBiH we are witnesses to the existence of two opposite extremes when measuring subsequent goodwill valuation. On the one side, we have a great percentage share of the companies which, after the initial recognition of goodwill, write it completely off in the following fiscal year. This percentage share is over 46% in the sample from 2014 in comparison to 2013, when it hit its peak. This is the reason why the number of companies in the FBiH which recorded goodwill value impairment (66.13%) is much bigger than the average in the EU (20.10%).

The second extreme is a large percentage share of companies (about 40% on average) in which goodwill values remained unchanged in the observed period of 6 years. Regression and correlation tests have shown that most of these companies were obligated to impair the goodwill value during the period. The fact that goodwill value did not decrease in companies which experienced decrease in capital and business assets during the observed period means that the management of those companies created false financial reports which had a direct positive impact on the value of their operative result. These correlations and regressions did not reach statistical significance with a small sample of companies the value of which remained unchanged during 6 years. Therefore, these conclusions require additional confirmation.

The research also points to the fact that, when determining recoverable value of goodwill in FBiH companies, the most commonly used approach is determining “value of assets in use” for units that generate money (67.86%). This approach is subject to a much greater subjectivity in estimation comparing to a fair market value decreased by sale costs. A great level of subjectivity in estimation was also proved by the opinions of the respondents from the accounting profession employed in companies that had goodwill position in their balance sheets. The gained research results, as well as the theoretical review of controversies when balance position of goodwill is in question, emphasize the need to question the prescribed accounting treatment of goodwill. While some advocate the approach that goodwill value should be treated as a purchase cost and not be shown in assets, we advocate the approach that goodwill should be recognized in the balance sheet, but starting from the value of internally-generated goodwill. We find that it would be better to recognize goodwill value by the concept of fair value, than by the concept of cost. Considering that this recommended concept is faced with the issue of subjectivity in valuation, we find that it is possible to prescribe adequate economic categories which goodwill value should be in correlation with.

When goodwill and its valuation in FBiH companies is in question, the recommendation for future studies is to interview the appraisers and representatives of auditing houses, who have had experience in appraising the replaceable goodwill value. In this way, we will learn in more detail about the way to appraise future cash flows and to rate their discounting; and we will find out if the discounting rate represents predictions of future risks in operations, and, if so, in which way. Considering the fact that there is only one company in the FBiH whose stocks are actively traded on the Sarajevo Stock Exchange, studies that assume the application of the Ohlson model could not be conducted. The Ohlson model suggests that the market value of a company’s securities is a function of the book value of the company’s equity and earnings (Omarjee, F. Z., Yasseen, Y., Waheeda, M., 2019).

Recommendations for future studies on the development of the accounting science and accounting records in particular are to attempt to find a new concept for accounting valuation of the “framework assets” which would also solve the problem of valuating goodwill. The solution should be sought for in the introduction of a permanent or multidimensional accounting recording.

LITERATURE

1. Abdul Majid, Jamaliah (2013). Accounting choices relating to goodwill impairment: Evidence from Malaysia. PhD thesis. Available at: <https://pdfs.semanticscholar.org/46bf/184a5559fa2160cce355846b72cd19c9deb8.pdf>
2. Andre, P., Filip, A., Paugam, L. (2016). Examining the patterns of goodwill impairments in Europe and the US. *Accounting in Europe*. Available at: <https://doi.org/10.1080/17449480.2016.1260748>
3. Camodeca, R., Almici, A., Bernardi, M. (2013), Goodwill impairment testing under IFRS before and after the financial crisis: evidence from the UK large listed companies. – *Problems and Perspectives in Management*, 2013. Vol. 11(3): pp 17-23. Available at: https://businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/5330/PPM_2013_03_Camodeca.pdf
4. Dagvel, R., Windsor, C., Wines, G., *The Proposed Goodwill Impairment Test – Implications for Preparers, Auditors and Corporate Governance*, Working paper. Available at: <https://pdfs.semanticscholar.org/a7e5/3eb5565b3a758ae9a8dc205c46ae507e3e43.pdf>
5. Duff & Phelps, (2018). „2018 U.S. Goodwill Impairment Study“. Available at: <https://www.duffandphelps.com/insights/publications/goodwill-impairment/2018-us-goodwill-impairment-study>
6. Duff & Phelps, (2019). „2018 European Goodwill Impairment Study“. Available at: <https://www.duffandphelps.com/insights/publications/valuation-insights/valuation-insights-second-quarter-2019/duff-and-phelps-publishes-2018-european-goodwill-impairment-study>
7. EU directive 2013/34. Available at: <https://eur-lex.europa.eu/legal-content/HR/TXT/?uri=CELEX%3A32013L0034>
8. European Financial Reporting Advisory Group (EFRAG), (2016). *What do we really know about goodwill and impairment? A quantitative study*. Available at: <http://www.efrag.org/Assets/Download?assetUrl=/sites/webpublishing/SiteAssets/EFRAG%2520Quantitative%2520Study%2520Goodwill%25202016.pdf&AspxAutoDetectCookieSupport=1>

9. FSMA, (2012). Study on the publication of information on goodwill, under IAS 36, in the financial statements of listed companies for the 2010 financial year. Available at: <https://www.fsma.be/en/studies-and-documents>
10. Gonçalves, C., Rebbelo, E., Ferreira, L., Fernandes, S., (2017). A relevância do goodwill: fatores contingentes, Revista, Vol. 39 (Nº 11) Ano 2018. Pág. 22, ISSN 0798 1015, Available at: https://www.researchgate.net/publication/324209424_A_Relevancia_do_goodwill_fatores_contingentes
11. IFRS 3, IAS36, and IAS 38, Available at: <http://www.srr-fbih.org/msfirms-14>
12. IFRS Foundation, (2014). Post-implementation Review: IFRS 3 Business Combinations. Request for information. Available at: http://archive.ifrs.org/Current-Projects/IASB-Projects/PIR/PIR-IFRS-3/Request-for-Information-January-2014/Documents/RfI_PIR_IFRS3-Business-Combinations.pdf
13. Korošec, B., Jerman, M., Tominc, P., (2016). The impairment test of goodwill: an empirical analysis of incentives for earnings management in Italian publicly traded companies, *Economic Research-Ekonomska Istraživanja*, 29:1, 162-176, DOI: 10.1080/1331677X.2016.1164923, Available at: <https://doi.org/10.1080/1331677X.2016.1164923>
14. KPMG (2009). Framework Assets and Goodwill in the context of Business Combinations, Available at: <https://www.consultancy.nl/media/KPMG%20%20Framework%20Assets%20and%20Goodwill-836.pdf>
15. KPMG (2014). Who cares about goodwill impairment? A collection of stakeholder views. Available at: <https://assets.kpmg.com/content/dam/kpmg/pdf/2014/04/impairment-qa.pdf>
16. Malijebtou Hassine, N., Jilani, F., (2017). Earnings Management Behavior with Respect to Goodwill Impairment Losses under IAS 36: The French Case, *International Journal of Academic Research in Accounting, Finance and Management Sciences* Vol. 7, No.2, pp. 177–196 E-ISSN: 2225-8329, P-ISSN: 2308-0337, Available at: https://www.researchgate.net/publication/325124120_Earnings_Management_Behavior_with_Respect_to_Goodwill_Impairment_Losses_under_IAS_36_The_French_Case
17. Munteanu, V., Tinta, A., Andrei A. E., Vatasoiu, C.I., (2012). The accounting treatment of goodwill as stipulated by IFRS 3, *Procedia - Social and Behavioral Sciences* 62, pp. 1120 – 1126, Available at: https://www.researchgate.net/publication/279138503_The_Accounting_Treatment_of_Goodwill_as_Stipulated_by_IFRS_3
18. Omarjee, F. Z., Yasseen, Y., Waheeda, M., (2019). The Value Relevance of Aged Goodwill: A South African Study, DOI: 10.25159/1998-8125/3868, Available at: <https://www.researchgate.net/publication/333361280>

19. Peristeris, K., (2016). Master Thesis Goodwill Impairment versus Goodwill Amortization: Which regime reflects better the underlying economic attributes of goodwill?, University of Pireus, Department of Banking and Financial Management, Available at: <https://pdfs.semanticscholar.org/7d4e/33080926917619a33c8e1e5c7c5e9066d0b2.pdf>
20. Ramanna, K., Watts, R. L. (2011). Evidence on the use of unverifiable estimates in required goodwill impairment (Harvard Business School Working Papers). Harvard Business School, Boston, MA., Available at: https://dash.harvard.edu/bitstream/handle/1/11320612/ramana%2Cwatts_evidence-on-the-use_SSRN-id1134943.pdf?sequence=1
21. Renato Camodeca, Alex Almici and Matteo Bernardi (2013). Goodwill impairment testing under IFRS before and after the financial crisis: evidence from the UK large listed companies. *Problems and Perspectives in Management*, 11(3), Available at: https://businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/5330/PPM_2013_03_Camodeca.pdf
22. Seetharaman, A., Balachandran, M., Saravanan, A. S., (2004). Accounting treatment of goodwill: yesterday, today and tomorrow. *Problems and prospects in the international perspective*, *Journal of Intellectual Capital*, Vol. 5 No. 1, pp. 131-152, Emerald Group Publishing Limited 1469-1930 DOI 10.1108/14691930410512969, Available at: <https://www.emerald.com/insight/content/doi/10.1108/14691930410512969/full/html?fullSc=1>
23. Tretyakov, I., (2013). The role of Goodwill in understand the financial position of a company, Bachelor's thesis, *Industrial Management*, Valkeakoski, Available at: <https://www.theseus.fi/handle/10024/70405>

PROBLEMATIKA VREDNOVANJA GOODWILL-A: PRIMJER KOMPANIJA IZ FEDERACIJE BOSNE I HERCEGOVINE

Sažetak

Rad ima za cilj utvrditi, kako spram teorijskih tako i empirijskih rezultata istraživanja, koliko trenutni računovodstveni regulatorni okvir (IFRS 3 i IAS 36) pruža adekvatnu osnovu za pravilno vrednovanje goodwill-a. Istražili smo kritičke osvrte na računovodstveni tretman goodwill-a, te kvalitetu primjene računovodstvene regulative na iskazivanje pozicije goodwill-a u praksi kompanija u BiH. Provedeno je emirijsko istraživanje nad cjelokupnom populacijom kompanija u Federaciji Bosne i Hercegovine (FBiH), koji su u periodu od 2013. do 2018. godine imali evidentiran goodwill u svojoj bilanci. Rezultati istraživanja pokazuju visok nivo subjektivnosti pri određivanju vrijednosti goodwill-a, te velike nedosljednosti u poštivanju računovodstvene regulative u dijelu naknadnog vrednovanja i iskazivanja vrijednosti goodwill-a u financijskim izvještajima. To je rezultiralo činjenicom da učešće kompanija u FBiH koje iskazuju umanjenje vrijednosti goodwill-a, bude daleko veće nego učešće kompanija u Evropskoj uniji (EU).

Glavni doprinos rada se ogleda u činjenici da je ovo prvo sveobuhvatno istraživanje o načinu vrednovanja goodwill-a u kompanijama FBiH, te komparaciji sa stanjem u EU. Također, znanstveni doprinos leži i u potvrdi Agencijske teorije, te velike subjektivnosti u vrednovanju, što rezultira neopravdanim iskazivanjem višeg poslovnog rezultata u financijskim izvještajima.

Ključne riječi: računovodstveni tretman goodwill-a, umanjenje vrijednosti goodwill-a, FBiH