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MILUTIN ŽIVANOVIĆ¹

E-mail: milutin.zivanovic@ekof.bg.ac.rs

WHAT DETERMINES THE APPLICATION OF IFRS 3 IN ACCOUNTING FOR GOODWILL?

DETERMINANTE PRIMENE STANDARDA MSFI 3 PRILIKOM RAČUNOVODSTVENOG TRETMANA GUDVILA

JEL CLASSIFICATION: G 34, M 21, M 41, M42

ABSTRACT:

Accounting treatment of goodwill is often described as one of the most complex and controversial topics in the field of financial reporting, so it is of primary interest to examine the factors that affect application of IFRS 3 in Serbia given the low quality of financial reporting in developing countries to which Serbia belongs. Paper results show low quality of financial reporting on domestic business combinations which is an indicator to professional and regulatory bodies that there is significant room for improvement in this field. Research findings also show that: type of audit firm, the country of origin in which ultimate owner of an acquirer operates, legal form of an acquirer and finally transaction size play an important role in determining whether an acquirer will apply IFRS 3 when it comes to accounting for goodwill. Besides that paper reveals that materiality of goodwill is of significantly lower magnitude in domestic transactions than in transactions real-

1 University of Belgrade, Faculty of Economics, Kamenička 6, 11000 Belgrade, Serbia

ized in developed European economies, but that the average percentage of consideration transferred allocated to goodwill is almost identical which implies that on average domestic and European M&As are equally motivated by the acquisition of goodwill as of the acquisition of identifiable net assets.



KEYWORDS:
GOODWILL, BUSINESS COMBINATIONS, IFRS 3

APSTRAKT:

Računovodstveni tretman gudvila često se opisuje kao jedna od najsloženijih i najkontroverznijih tema iz oblasti finansijskog izveštavanja, te je od primarnog značaja ispitati faktore koji utiču na primenu standarda MSFI 3 kod preduzeća koja posluju u Srbiji, pogotovo imajući u vidu nedovoljnu razvijenost sistema finansijskog izveštavanja koja je karakteristična za zemlje u razvoju kojima Srbija pripada. Rezultati istraživanja su potvrdili izuzetno nizak stepen kvaliteta finansijskog izveštavanja o poslovnim kombinacijama što predstavlja indikator profesionalnim i regulatornim telima da postoji značajan prostor za unapređenje na ovom polju. Rezultati su takođe pokazali da: tip revizorske firme, zemlja porekla iz koje potiče ultimativni vlasnik preduzeća sticaoca, pravna forma preduzeća sticaoca i, konačno, veličina transakcije igraju značajnu ulogu prilikom donošenja odluke da li će sticalac primeniti standard MSFI 3 prilikom priznavanja gudvila. Pored toga, u radu se došlo do nalaza da je materijalnost gudvila značajno manja u domaćim transakcijama u odnosu na transakcije koje su realizovane u razvijenim evropskim zemljama, dok je procenat prenesene nakanade koji je alociran na gudvil gotovo identičan, što implicira da su u proseku domaći i evropski merdžeri i akvizicije podjednako motivisani sticanjem gudvila i sticanjem identifikovane neto imovine.



KLJUČNE REČI:
GUDVIL, POSLOVNE KOMBINACIJE, IRFS3



1. INTRODUCTION

From an accounting perspective, mergers and acquisitions represent one of the most complex transactions. The current accounting standard IFRS 3 and the acquisition method have brought with them a number of challenges, both for management and for the preparers of financial statements. Some of the most important are: judging whether an entity has acquired control over another entity in a particular transaction, whether the transaction has the character of a business combination or acquisition of assets, determining the fair value of the consideration transferred, determining the fair value of the acquiree's net assets, identifying and valuing intangible assets that can be recognized separately from goodwill as well as goodwill itself. Having in mind that the Law on Accounting, which is applied in the Republic of Serbia, requires mandatory application of International Financial Reporting Standards, domestic companies are obliged to apply IFRS 3 when it comes to business combinations. Any deviation from IFRS 3 leads to distorted information about expected benefits and performance of business combinations. The aim of this paper is to examine the quality of financial reporting on domestic business combinations that are realized in the Republic of Serbia from 2006 to 2018 in which goodwill arose. In addition, it is of particular interest to examine what determines whether the acquirer will apply IFRS 3 at the acquisition date, given the low quality of financial reporting that is characteristic of developing countries to which Serbia belongs. Also, we are interested in goodwill values over sample period and its comparison to goodwill values reported in business combinations realized in developed countries.

The contribution of this paper can be summarized as follows. First, the findings presented in this paper indicate low quality of financial reporting on business combinations in Serbia which is an indicator to professional and regulatory bodies that there is significant room for improvement in this field. Second, the results show that the key factor influencing the application of IFRS 3 is the type of audit firm engaged by the acquirer in the year of the business combination. Additionally, the findings show that legal form of an acquirer, the country of origin of the owner that ultimately controls an acquirer and transaction size play an important role in explaining whether the acquirer will apply IFRS 3. Third, when analyzing the value and components of goodwill, it is necessary to identify and focus on transactions to which IFRS 3 has been properly applied, otherwise it is possible to jump to the wrong conclusion about the expected benefits from the business combinations. Fourth, results show that in years when there is an increase in the level of economic activity the proportion of business combinations with goodwill rises in comparison to the proportion of business combinations with a bargain purchase gain. Fifth, it is documented that domestic M&As generate lower expected benefits than M&As which take place in developed European countries. However, research shows that even if materiality of goodwill is of significantly lower magnitude in domestic transactions than in transactions realized in developed European economies, the average percentage of consideration transferred allocated to goodwill is almost identical which means that on average domestic and European M&As are equally motivated by the acquisition of goodwill as of the identifiable net assets.

2. ACCOUNTING FOR GOODWILL UNDER IFRS 3

Accounting treatment of goodwill is often described as one of the most complex and controversial topics in the field of financial reporting². Numerous and frequent changes in accounting standards that focus on the recognition and measurement of goodwill are clear evidence that there is still no consensus on what goodwill actually consists of³. Historically, accounting for goodwill has gone through various stages and undergone significant changes that have been strongly influenced by prevailing balance sheet theories as well as lobbying by various stakeholders⁴. As Law on Accounting⁵, which is applied in the Republic of Serbia, requires mandatory application of International Financial Reporting Standards, domestic companies are obliged to apply current IFRS 3 when it comes to business combinations. IFRS 3 is an accounting standard that is applicable to business combinations in which a particular entity, called the acquirer, acquires control over one or more other entities that meet the definition of a business. The core of this standard is the acquisition method, which implies that the following steps must be performed when business combination occurs⁶: (1) identifying a business combination; (2) identifying the acquirer and the acquisition date; (3) measuring the fair value of consideration transferred; (4) recognizing and measuring identifiable assets acquired and liabilities assumed and (5) calculating goodwill or a bargain purchase gain. Each of these steps, especially the fourth one, can be very demanding and complex, and any mistake that is made within them can have a significant impact on the value and information content of goodwill.

According to IFRS 3 goodwill is an asset calculated as the difference between fair value of consideration transferred and fair value of identifiable net assets of an acquired entity. If goodwill is calculated properly it should reflect the sum of the: (1) fair value of the „going concern” element of the acquiree’s existing business and (2) fair value of synergies from combining the acquirer’s and acquiree’s businesses and net assets⁷. Goodwill that consists solely of these two components is also known as *core* goodwill because it represents total benefits that are expected from the transaction. Investors positively value only the components of core goodwill⁸. Any deviation from IFRS 3 and acquisition method leads to goodwill numbers that do not show its core value. Such goodwill is not in line with fundamental qualitative characteristics⁹ and cannot be used as an input in the analysis of the expected benefits of business combination. Therefore, it is extremely important to examine the quality of financial reporting on domestic business combinations and factors that affect the application of IFRS 3 especially given the low quality of financial reporting that is characteristic of developing countries to which Serbia belongs.

2 Bugeja & Gallery (2006), p. 521.

3 Eloff (2015), p. 1.

4 Ding et al., (2007), p. 718-755.

5 Official Gazette of RS, Nos. 62/2013, 30/2018 and 73/2019 - other law, available at: <https://www.paragraf.rs/propisi/law-on-accounting-republic-of-serbia.html>

6 IFRS (rev. 2008, para 4-5), retrieved from: https://www.mfin.gov.rs/upload/media/aKQ39I_6015e649c8cfa.pdf [accessed 14.5.2021.]

7 Johnson & Petrone (1998), p. 3.

8 Živanović (2017), p. 69-87.

9 Conceptual framework for financial reporting (2019), retrieved from

3. DATA AND SAMPLE

As it is stressed out earlier, the focus of this paper is on the business combinations realized in the Republic of Serbia in which goodwill arose, during the period 2006 - 2018. Although the first full annual period in which companies applied IFRS 3 was 2005¹⁰, having in mind its complexity, short history of application of IAS that existed at that time in domestic companies, as well as the low level of quality of financial reporting that is characteristic of developing countries, the first annual period that is included in sample is 2006. Thus, the companies were given some time to adjust to the requirements regarding the new accounting rules for business combinations.

Hand-collected data from the acquirer's audited consolidated financial statements are used in a research, with notes to the consolidated statements being identified as the most significant source of information on this type of transaction. There are several reasons why this data collection technique is applied. First, there is no single register that provides data on all business combinations realized in the Republic of Serbia in a given year. Second, commercial databases contain data on business combinations only above the predefined deal value threshold and are biased in favor of data on transactions in which listed companies participate, which all together can significantly reduce the size of the sample given the characteristics of domestic M&A transactions. Third, in this way, certain accounting information can be obtained at the level of an individual transaction which are often not available in commercial databases (e.g. information on goodwill and intangible assets recognized separately from goodwill; information on book and fair value of the net assets of the acquired entity at the business combination date, information on the calculated difference between the fair and book value of the net assets of the acquired entity and its sources, etc.). Fourth, data from the acquirer's notes, provide insight into the level of details and quality of disclosed information on business combinations. Finally, as the audited consolidated financial statements are accompanied by an independent auditor's report, it is possible to further verify the quality of accounting information about mergers and acquisitions.

In order to identify business combinations, a review of the acquirer's audited consolidated financial statements is performed¹¹ for each year within the sample period. Therefore, 8,729 submitted audited consolidated statements are reviewed and 1,131 business combinations are registered. Analyzing and comparing the growth rate of total mergers and acquisitions during the sample period, as an indicator of the dynamics of activity in the domestic market of business combinations, and GDP growth rate of the domestic economy, as a unified indicator of economic activity, it is documented that there is a strong positive correlation between these two variables (0.76). This finding confirms that the domestic mergers and acquisitions are cyclical and influenced by general economic conditions.

10 IFRS was effective for business combinations for which the agreement date is on or after 31 March 2004.

11 Thus, it is not possible to register a business combination if: (1) the acquirer has not submitted audited financial statements for a given year; (2) the acquirer has merged the acquired entity in the same year as of the business combination (there is no obligation to prepare consolidated financial statements in such circumstances) and (3) the acquirer has not disclosed in its notes the basis of consolidation (e.g., acquisition of an acquiree vs. establishment of a subsidiary).

Total number of transactions where IFRS 3 is applied (IFRS business combinations) amounts to 111 (10% of the population) while the remaining of 1,020 transactions are identified as business combinations that are not accounted for in accordance with IFRS 3 (non-IFRS business combinations).

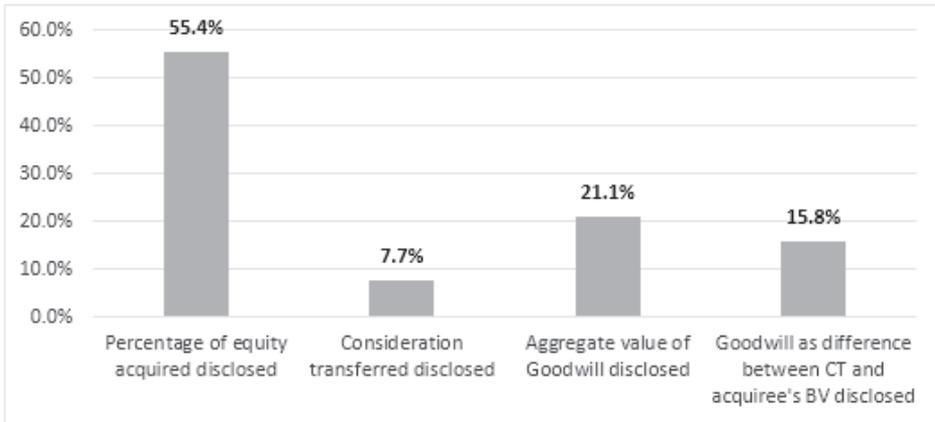
3.1. Financial reporting on business combinations not complied with IFRS 3

The prevalence of transactions that do not comply with IFRS 3 is quite alarming. Therefore we will first address main characteristics of financial reporting on business combinations that are not accounted for in accordance with IFRS 3. We are interested in the level of details that acquirers disclosed on non-IFRS business combinations they participate in as well as in the roots of abandoning the application of the relevant accounting standard.

Of the total number of these transactions (1,020), in as many as 55% of cases, the only information disclosed is about the percentage of acquired stakes which implies that for more than half of the transactions there is no financial information disclosed. Additionally, for 8% of non-IFRS transactions there is information on consideration transferred disclosed. Taken together, evidence show that in almost two-thirds of business combinations not complied with IFRS 3, there is no information related to goodwill as a possible indicator of expected benefits from a business combination. In slightly more than a third of cases (37%) information on the value of goodwill (a bargain purchase gain) is disclosed, with 21% of transactions showing only the aggregate value of goodwill (a bargain purchase gain) without any information on how this item was calculated. For the rest of the 16% of non-IFRS business combinations, the calculation of goodwill (a bargain purchase gain) is disclosed showing that acquirers do not comply with acquisition method when it comes to request for measurement of the net identifiable assets at fair value as of the acquisition date. More precisely, in all these cases goodwill (a bargain purchase gain) is calculated as the difference between the consideration transferred and the book value of the acquired equity. Of the total number of transactions not complied with IFRS 3 in 45% of cases (170 transactions) acquirers reported goodwill but for 45 transactions there are missing data necessary for further analysis of determinants of application of IFRS 3 in goodwill accounting. Therefore, final sample consists of 145 non-IFRS business combinations with goodwill reported¹².

12 A bargain purchase gain was identified in 21% of non-IFRS transactions while proportional allocation of consideration transferred to existing acquiree's net assets which result in non-recognition of goodwill nor a bargain purchase gain was identified in as much as 34% of cases.

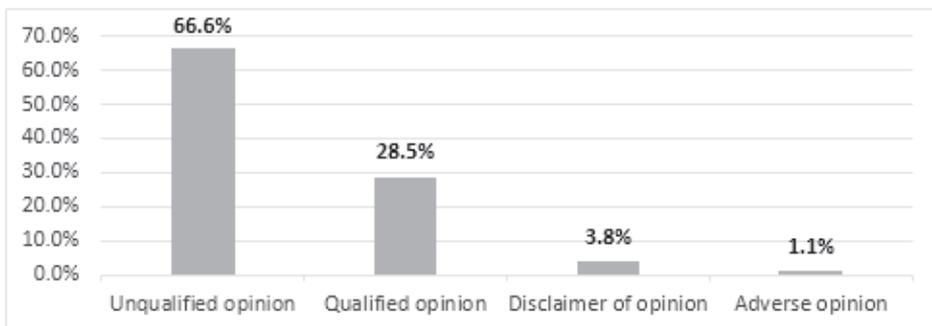
▶ **FIGURE 1. DISCLOSED INFORMATION ON NON-IFRS3 BUSINESS COMBINATIONS**



Source: Author's calculation based on data from consolidated financial statements

What is even more worrying are the results obtained by reviewing the independent auditor's reports showing that in as many as two thirds of cases (67%), in which the acquirer do not account for business combinations in accordance with IFRS 3, clear reports with unqualified opinion are found. In 29% of cases, qualified opinion reports are identified, however, only in 10%¹³ of these cases (31 out of 301) the basis for qualified opinion was acquirer's non-compliance with IFRS 3 (without quantifying any of the financial effects). Disclaimer of opinion is identified in 4% of cases, while an adverse opinion is identified in 1% of cases, whereby in none of these cases the basis for disclaimer of opinion or an adverse opinion is noncompliance with IFRS 3.

▶ **FIGURE 2. TYPE OF AUDITOR'S REPORT ON NON-IFRS3 BUSINESS COMBINATIONS**



Source: Author's calculation based on data from independent auditor's reports

13 The audit of financial statements in these cases was predominantly performed by audit firms belonging to the *Big 4* group.

These results show that it is not only the low quality of financial reporting on business combinations and the level of disclosed information that is worrying, but also the quality of audit of consolidated financial statements when it comes to business combinations. Hence, these findings should serve as a warning to professional and regulatory bodies that there is significant room for improvement related to this aspect of financial reporting and auditing.

3.2. Financial reporting on business combinations complied with IFRS 3

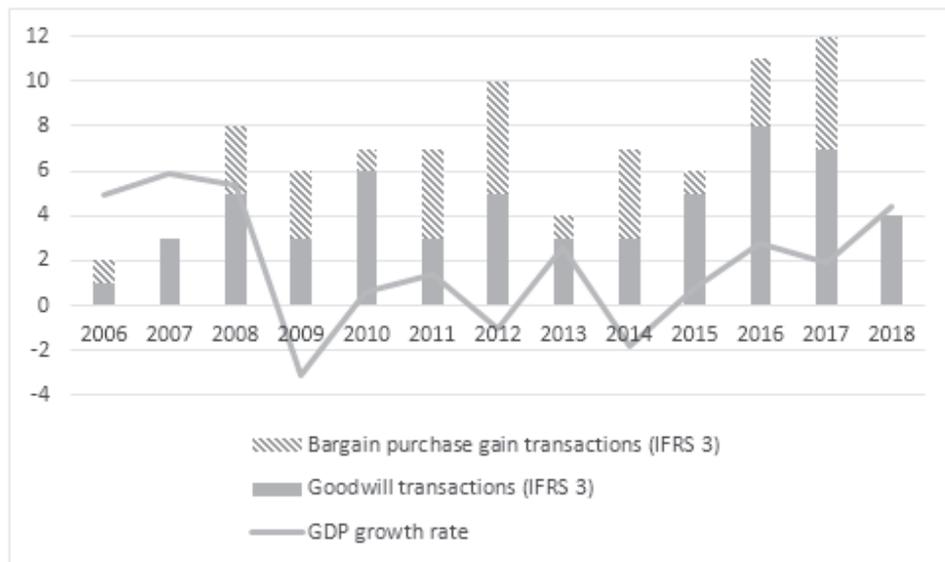
We now focus on those business combinations that are properly accounted for in accordance with IFRS 3 in which goodwill arose. Earlier in the paper it was pointed out that adequate application of IFRS 3 was identified in 111 transactions (10% of total registered transactions). In 61% of business combinations complied with IFRS 3 acquirers reported goodwill¹⁴. By inspecting the notes it is found that five transactions resulting in goodwill recognition are business combinations under common control. Considering that these transactions are not within the scope of IFRS 3 and that their motives generally differ from those of typical business combinations, they are not included in the final sample. For nine transactions it is identified that some of the data that are necessary for further analysis are missing. Hence, the final sample of IFRS business combinations with goodwill reported consists of 52 transactions.

Research findings reveal that the share of transactions in which acquirers reported goodwill in comparison to the share of transactions where acquirers reported a bargain purchase gain is positively correlated with GDP growth rate¹⁵. These results show that in the years when there is an increase in the level of economic activity the proportion of business combinations with goodwill rises in comparison to those with a bargain purchase gain. The reverse is also true, when there is a decrease in economic activity, we can expect a decrease in the proportion of transactions with goodwill reported and an increase of the proportion of business combinations where a gain from a bargain purchase arises.

14 while in 30% of these transactions a bargain purchase gain was identified. In 9% of cases the fair value of the consideration transferred was equal to the fair value of the identifiable net assets so neither goodwill nor bargain purchase gain were reported.

15 Correlation coefficient is 0.65.

► FIGURE 3. GOODWILL VS. BARGAIN PURCHASE GAIN AND GDP GROWTH RATE



Source: Author's calculation based on data from consolidated financial statements

When it comes to goodwill values over analyzed period, we can see that goodwill-to-assets ratio has had a predominantly downward trend since 2007. The average value of goodwill-to-assets ratio for the entire observed period is 4.3%. A study conducted by EFRAG (European Financial Advisory Group) whose main purpose was to review the quality of accounting treatment of acquired goodwill in accordance with IFRS 3, identified that the average goodwill-to-assets ratio of sampled companies in the period 2005-2014, was 16.7% (financial institutions are excluded from the analysis which is in line with our sample structure)¹⁶. These results are consistent with the results obtained in some previous studies¹⁷ and implies that domestic M&As generate lower expected benefits than M&As which take place in developed European countries. On the other hand goodwill-to-consideration-transferred ratio fluctuated significantly over the analyzed period with an average value of 52%. This result is similar to the results obtained in two different European studies that assessed the implementation of IFRS 3. A study conducted in 2012, on a sample of 56 European companies, by ESMA (European Securities and Markets Authority) identified that the average goodwill-to-consideration transferred ratio was about 54%¹⁸. A study conducted by the investment bank Houlihan Lokey, which analyzed business combinations realized on the European market in the period 2007-2011, found that the average goodwill-to-consideration transferred ratio was around 45%¹⁹. This further means that even if the materiality of goodwill is of significantly lower magnitude in domestic transactions than in transactions realized in developed European

16 EFRAG (2016), p. 27.

17 Živanović & Džudović (2019), p. 299-314.

18 ESMA (2013), p 13.

19 Houlihan Lokey (2013), p. 29-39.

economies, the average percentage of consideration transferred allocated to goodwill is almost identical. Actually, domestic M&As complied with IFRS 3 are, on average, equally motivated by the acquisition of identified net assets and the acquisition of goodwill.

Results also show that for transactions to which IFRS 3 has not been properly applied the percentage of consideration transferred allocated to goodwill is on average 4 percentage points higher than for transactions complied with IFRS 3. However, the reasons for the higher value of goodwill in business combinations in which the application of IFRS 3 has been abandoned should not be sought in the greater success of these transactions or in the greater motivation to acquire goodwill, but in the deviation from IFRS 3 (the acquisition method). This could happen because an acquirer fails to: (1) remeasure the acquired net assets at fair value as of the acquisition date and (2) analyze and identify intangible assets that can be recognized separately from goodwill. These results once again confirm the importance of differentiating transactions depending on whether IFRS 3 has been applied to them, as well as the need to examine the factors that affect the application of IFRS 3 in accounting for goodwill. Therefore, when analyzing the value and components of goodwill, it is necessary to identify and focus solely on transactions to which IFRS 3 has been properly applied, otherwise it is possible to jump to the wrong conclusion about the expected benefits from the business combinations.

▶ **FIGURE 4. GOODWILL-TO-ASSETS RATIO AND PERCENTAGE OF CONSIDERATION ALLOCATED TO GOODWILL**



Source: Author's calculation based on data from consolidated financial statements

4. FACTORS AFFECTING THE APPLICATION OF IFRS 3 IN GOODWILL ACCOUNTING

One of the findings that was previously presented in the paper refers to the high positive correlation between M&A growth rate and GDP growth rate which implies that the M&A dynamics is determined by general economic trends which further leads to a conclusion that domestic business combinations are cyclical and under the influence of prevailing economic conditions. However, if we solely focus on the dynamics of the business combinations with goodwill reported that are accounted for in accordance with IFRS 3 and compare it to GDP growth rate there is almost no correlation (0,07). Also, when observ-

ing the number of business combinations with goodwill reported that are complied with IFRS 3 in each year during the sample period, it can be found that dynamics of these transactions differ from the dynamics of all registered transactions. Such unexpected findings that the number of transactions on which IFRS 3 is properly applied in each year does not correspond to the levels of overall M&A and economic activity paved the way for further research into the factors affecting the application of IFRS 3 by individual acquirers in certain years.

Bugeja & Loyeung show that *Big 4* audit firms provide higher quality of audit services compared to audit firms that do not belong to this group as well as that *Big 4* audit firms have appropriate mechanisms to prevent opportunistic managerial behavior, which all together has a positive impact on the overall quality of financial statements. Additionally, *Big 4* audit firms possess the higher levels of knowledge and experience required to audit complex transactions such as business combinations. Due to the lower reputational risk they are exposed to and less expertise in the field of business combinations, non-*Big 4* audit firms are more willing to accept other solutions that do not comply with IFRS 3 requirements such as: giving up measurement of net identifiable assets at fair value as of the acquisition date; giving up identification of intangible assets that could be recognized separately from goodwill and proportional allocation of consideration transferred to existing acquiree's net assets which result in non-recognition of goodwill nor a bargain purchase gain²⁰. Therefore, it is assumed that the proportion of business combinations that have been properly accounted for in a certain year is highly positively correlated with the share of audits performed by *Big 4* companies in that specific year. It is also assumed that the proportion of *Big 4* firms will be higher in the subsample of business combinations complied with IFRS 3 than in the subsample of those transactions that are not accounted for in accordance with IFRS 3.

Based on the results obtained by Bhagat et al. it is assumed that when acquirers are controlled by a foreign parent company, based in a country with a higher level of economic development in comparison to the country in which the transaction takes place, the quality of financial reporting will be at a higher level compared to acquirers that are ultimately controlled by domestic owners. This is due to the higher level of quality of corporate governance, internal controls, accounting knowledge and expertise which are related to acquirers controlled by a foreign parent company operates in more developed country²¹. Therefore, it is assumed that those acquirers which are controlled by a foreign company are more willing to apply IFRS 3 than those who are ultimately controlled by domestic owners.

Due to more stringent requirements in terms of the dynamics and transparency of financial reporting, due to the mandatory audit of individual financial statements regardless of the size of the company and due to the greater interest of the investment public in their business, joint stock companies are expected to have a better financial reporting system than companies operating in other legal forms. Hence, it is assumed that acquirers operating as a joint stock company are more prone to apply IFRS 3 comparing to acquirers that operate in other legal forms.

20 Bugeja & Loyeung (2011), p. 1-29.

21 Bhagat et al. (2011), p. 250-271.

In addition to all of the previously described variables, the deal value is assumed to influence the company's decision to apply IFRS 3. Namely, in higher value transactions, the acquirers are mostly large companies that perform different types of due diligence before the transaction. Therefore, it is logical to expect that these are companies whose management and accountants have a sufficient level of knowledge and expertise in the field of business combinations. Also, transactions of higher value can have a significant impact on overall economic trends, so the interest of the general public for the motives and effects of these transactions is often higher than for the transactions of lower value. This creates more pressure on the management of the company to disclose all relevant information related to these transactions. Additionally, higher value transactions are more likely to have a material impact on the financial statements, which puts more pressure on both accountants and auditors to ensure their proper accounting treatment. Therefore, it is assumed that the application of IFRS 3 is related to transactions of higher average values.

5. RESEARCH RESULTS

It is evidenced that there is a strong positive correlation (0.82) between the share of business combinations to which IFRS 3 is applied and the share of consolidated financial statements audited by *Big 4* companies during the sample period. When the analysis is extended to the audit firms that are licensed to audit financial institutions which are considered of better quality than the average audit firm on domestic market due to the criteria they should meet in terms of number and level of competence of employees²² the findings previously presented remain unchanged. Results show strong positive correlation (0.85) between the share of business combinations to which IFRS 3 is applied and the share of consolidated financial statements audited by firms licensed to audit financial institutions.

► FIGURE 5. GOODWILL UNDER IFRS 3 AND TYPE OF AUDIT FIRM



Source: Author's calculation based on consolidated statements and auditor's reports

Additionally, Z-test is performed in order to compare the proportion of *Big 4* firms in the subsample of IFRS business combinations with the proportion of *Big 4* firms in the subsample of transactions to which IFRS 3 is not applied. Results show that the proportion of *Big 4* firms is higher for subsample of transactions complied with IFRS 3 at the 1% level of significance. The results remain unchanged when instead of *Big 4* firms we observe audit firms that are licensed to audit financial institutions (results not tabulated). Consequently, it is assumed that the application of IFRS 3 in accounting for business combinations for domestic acquirers is primarily determined by the type of audit firm that audits the consolidated financial statements in the year of the business combination.

There is also two-group proportion test employed to compare proportions of acquirers controlled by a foreign parent company at the level of two subsamples. Results show that the proportion of acquirers controlled by a foreign parent company is higher for subsample of transactions complied with IFRS 3 at the 1% level of significance. Further, in line with expectations, results of two-group proportion Z-test confirm that the proportion of the acquirers that operate as joint-stock companies is significantly higher in the case of transactions to which IFRS 3 has been applied²³.

When it comes to the transaction size and application of IFRS 3, it is two-group mean-comparison test (t-test) performed in order to compare average deal value between IFRS and non-IFRS business combinations. Results show that the average transaction size is higher for business combinations that are accounted for in accordance with IFRS 3. The difference in means is statistically significant at the level of 1%.

▶ **TABLE 1. RESULTS OF TWO-GROUP PROPORTION TEST**

	IFRS 3 applied n = 52	IFRS 3 not applied n = 145	Two-group proportion test (Z-test)
	Proportion	Proportion	
Big 4	67.3%	2.7%	z = -10.0219***
Foreign parent company	50.0%	12.4%	z = -5.5831***
Joint-stock company	25.5%	6.3%	z = -3.2937***

Source: Output from STATA software

▶ **TABLE 2. RESULTS OF TWO-GROUP MEAN-COMPARISON TEST**

	IFRS 3 applied n = 52	IFRS 3 not applied n = 145	Two-group mean-comparison test (t-test)
	Mean	Mean	
Transaction size	17.637	18.850	t = -3.3979***

Source: Output from STATA software

5. CONCLUSION

The results show a low level of quality of financial reporting and audit of business combinations in Serbia which should serve as a warning to professional and regulatory bodies that there is a significant room for improvement. Research findings imply that there are several factors that possibly affect application of IFRS 3 in goodwill accounting such as: the type of audit firm, the country of origin in which ultimate owner of an acquirer operates, legal form of an acquirer and finally transaction size. Therefore, the proportion of *Big 4* firms, acquirers controlled by foreign parent companies that operate in more developed countries than Serbia and acquirers which operate as joint-stock companies which altogether imply better quality of financial reporting are higher in subsamples where IFRS 3 is applied. Results also show that the application of IFRS 3 is related to transactions of higher average deal values.

Research results show that when using the value of goodwill for analyzing expected benefits of business combinations, it is necessary to identify and focus on transactions to which IFRS 3 has been properly applied, otherwise it is possible to jump to the wrong conclusion. It is found that domestic M&As generate lower expected benefits than M&As which take place in developed European countries. Finally, findings indicate that even if materiality of goodwill is of significantly lower magnitude in domestic transactions than in transactions realized in developed European economies, the average percentage of consideration transferred allocated to goodwill is almost identical which means that on average domestic and European M&As are equally motivated by the acquisition of goodwill as of the identifiable net assets.

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