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GOODWILL MEASUREMENT IN CONSOLIDATED FINANCIAL STATEMENTS

The largest business in terms of capitalization value, revenues and profits was formed as a result of a business combination. Consolidated financial statements are of undoubted value to users and stakeholders in assessing risks, prospects and analyzing the interaction of companies within the group. Special indicators of consolidated financial statements, such as goodwill, allow estimating the expected value of acquired companies in a business combination. However, the current methodology does not allow for the evaluation of all aspects of value that constitute goodwill. The aim of the article is to supplement the methods of goodwill valuation in business combinations for further substantiated disclosure in consolidated financial statements, in accordance with the interests and needs of investors and managers. The research methodology is based on a systematic approach, critical analysis, synthesis, induction and deduction, comparison, economic-mathematical methods of goodwill calculation, and generalization of principles of consolidated reporting. An analysis of key international standards allowed us to determine the peculiarities of applying the acquisition method for different types of business combinations. The share of ownership in an investee determines the nature of influence and the method of consolidation. Goodwill is the difference between the purchase price and the fair value of the net assets acquired in a business combination. When companies merge, goodwill reflects the intangible aspects of the business and the expected added value, which serves as the investment object. Therefore, methods for valuing goodwill during business combinations are identified to disclose in consolidated financial statements in accordance with IFRS.

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ОЦІНКА ГУДВІЛУ В КОНСОЛІДОВАНІЙ ФІНАНСОВІЙ ЗВІТНОСТІ

Найбільший бізнес за вартістю капіталізації, доходами і прибутками утворений в результаті об'єднання компаній. Консолідована звітність має безперечну цінність для користувачів та зацікавлених сторін в оцінці ризиків, перспектив та аналізу взаємодії компаній, що входять до складу групи. Такі особливі показники консолідованої звітності, як гудвіл, надають можливість оцінити очікувану цінність придбаних компаній при об'єднанні бізнесу. Проте діюча методика не дає змоги оцінити всі аспекти вартості, що формують гудвіл. Метою статті є доповнення методів оцінювання гудвілу при об'єднанні бізнесу для подальшого обґрунтованого розкриття у консолідованій фінансової звітності відповідно до інтересів і потреб інвесторів та менеджерів. Методика дослідження базується на системному підході, критичному аналізі, синтезі, індукції і дедукції, порівнянні, економіко-математичних методах розрахунку гудвілу, узагальненні принципів консолідованого звітування. За результатами аналізу ключових міжнародних стандартів визначено особливості застосування методу придбання для різних видів об'єднання бізнесу. Частка володіння в об'єкті інвестування визначає характер впливу та метод консолідації. Гудвіл показує різницю між ціною придбання та справедливою вартістю чистих активів, придбаних у результаті об'єднання бізнесу. При об'єднанні компаній гудвіл відображає нематеріальні аспекти та очікувану додану вартість бізнесу, що виступає об'єктом інвестицій. Тому виділено методи оцінювання гудвілу під час об'єднання бізнесу для розкриття у консолідованій фінансовій звітності відповідно до IFRS. Також систематизовано групу

Additionally, a group of complementary goodwill valuation methods is systematized to determine and justify all aspects of forming the undisclosed added value of the investee company. The proposed methodology allows for considering the interests of various stakeholders in goodwill valuation. It is crucial to regard the goodwill disclosed in the financial statements as consent and willingness of the parent company to pay more, based on evidence and calculations obtained through a comprehensive goodwill valuation methodology. The proven hypothesis of the research suggests that for a justified valuation of goodwill during consolidation, it is necessary to supplement existing approaches and measure the value of brand, long-term stability, sustainable development, corporate social responsibility, and utilize artificial intelligence. Goodwill reflects strategic value but may also be subject to impairment if its value is not sufficiently supported by expected profits.

Keywords: goodwill; consolidated financial statements; business combination; integrated reporting; International Financial Reporting Standards.

комплементарних методів оцінювання гудвілу для визначення та обґрунтування всіх аспектів формування доданої нерозкритої вартості підприємства-об'єкта інвестицій. Запропонована методика доає змогу врахувати інтереси різних зацікавлених сторін в оцінюванні гудвілу. Важливо розглядати розкритий у звітності гудвіл як згоду та готовність материнської компанії заплатити більше, що ґрунтується на доказах і розрахунках, отриманих завдяки комплексній методиці оцінювання гудвілу. Доведена гіпотеза дослідження, що для обґрунтованої оцінки гудвілу під час консолідації необхідно доповнити існуючі підходи і вимірювати вартість бренду, довгострокову стійкість, сталий розвиток, соціальну відповідальність бізнесу та використовувати штучний інтелект. Гудвіл відображає стратегічну цінність, але також може підлягати знеціненню, якщо його вартість не є достатньо обґрунтованою очікуваними прибутками.

Ключові слова: гудвіл; консолідована фінансова звітність; об'єднання бізнесу; інтегрована звітність; міжнародні стандарти фінансової звітності.

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Introduction

The importance of consolidation is determined by the need to provide complete and comprehensive financial information on the activities of all entities within a group or business combination. This process allows not only better managing available integrated resources and making informed strategic decisions, but also ensures completeness, transparency and impartiality of information for investors and creditors. Consolidated financial statements are prepared primarily in accordance with international accountting and financial reporting standards, which is very important in the context of business globalization. In addition, this process helps to manage risks and optimize taxation and financial planning, making businesses more efficient and competitive in today's business environment. In general, consolidation of financial statements is a key tool for ensuring integrated financial management of corporate resources of a group of companies, and goodwill reflects the willingness of the parent company investor to pay more in anticipation of a higher return on investment in a subsidiary.

The relevance of the research topic is due to the complex process of recognizing goodwill in business combinations and consolidation of financial statements. In essence, goodwill represents the value of goodwill, and in accounting it is an asset that is disclosed only in the consolidated statement of financial position. Goodwill arises when companies are bought and sold or when businesses are merged. Thus, it is a disclosed item and a full-fledged accounting item, but only at the time of consolidation. At the same time, the nature of external (disclosed) goodwill is to generate internal goodwill, which causes the value of the enterprise to increase at a rate higher than the growth of its balance sheet value. Goodwill arising from the acquisition of a business or company represents an overpayment made by the acquiring investor, who in turn expects additional future economic benefits from the purchase.

The obstacle of determining goodwill in consolidation of financial statements arises from the fact that goodwill is an asset that does not have specific physical or legal forms. Assessing and determining its value is difficult due to the uncertainty of the factors that generate goodwill and the lack of a clear methodology for assessing intangible off-balance sheet factors that generate internal goodwill. Goodwill embodies such aspects as business reputation, brand value, intellectual capital, customer loyalty, management efficiency, technological advantages, etc. As these factors are uncertain and often subjective, estimating their value becomes laborious. In addition, changes in conditions and the assessment of goodwill impairment are affected, as its value may be higher than the expected future cash flows from the investee. In today's rapidly changing environment, forecasting these cash flows may not be sufficiently reliable, and changes in the economic environment may significantly affect the estimate.

In the case of consolidation of a group of companies, an aggregation problem may arise, as goodwill may arise at each structural level of the business combination. The measurement and aggregation of goodwill in consolidated financial statements can be complex, especially if companies are located in different jurisdictions. The absence of specific standards and objective methods for valuing goodwill leads to a high degree of subjectivity in determining its value. Different methods related to discounting or comparative valuations may lead to different results. Overall, the challenge of determining goodwill lies in the complexities of valuing all aspects of a business, intangible factors of its worth, which characterize goodwill, becoming the object of consolidation in financial reporting. Additionally, the problem of goodwill assessment lies in the nature of its formation. Various entities assess goodwill – parties with different interests and objectives: the buyer-investor potentially intending to acquire a subsidiary, owners, managers, company accountants aiming to maximize internally generated goodwill, auditors, independent appraisers, relying on the requirements of current standards and regulatory documents.

Understanding the potential impact of intangible assets in modern conditions, the instability of companies' market value, where many aspects of business value remain unaccounted for in the accounting system and undisclosed in financial reporting due to the imperfection of International Financial Reporting Standards is crucial. Undisclosed aspects of value that form goodwill indicate that they are difficult to manage effectively since we cannot manage what we do not measure.

Investor companies, which acquire other enterprises, carry out business combinations to gain added value, worth, synergy, additional intangible assets, and integrate them into business groups. However, current methods do not allow for accurately assessing these components, which subsequently form goodwill, disclosed in consolidated financial statements. Therefore, there is a discrepancy between the book value and market value of the enterprise, between internally generated and externally disclosed goodwill. Consolidated financial statements most comprehensively demonstrate the value of all intangible assets of the group, including expectations reflected in goodwill. Although current recognition criteria, established by IAS 38, IFRS 3, IFRS 10, limit the ability to account for intangible value-generating factors, new IASB projects aim to modernize accounting approaches, including the assessment and accounting of goodwill. In anticipation of changes to IFRS, the existing goodwill valuation methodology needs significant supplementation and expansion to reflect modern business conditions and consider factors shaping goodwill.

The review of literature on the issues of recognition and calculation of goodwill and consolidation of financial statements reflects the complexity and relevance of these issues in the field of accounting and finance.

The definition and calculation algorithm of goodwill, as noted in the literature by (Voloshenko, 2020; Umantsiv, 2006; Hargrave et al., 2024) highlight the complexity of determining goodwill as an intangible asset, which lacks physical substance, with factors affecting its magnitude lying in the realm of competitiveness, assessment of business reputation, and future buyer expectations. Goodwill is also interpreted as the reputation of the company, calculated at the time of acquisition, and is identified as a component of intangible assets alongside components (classes) such as Franchise Agreements, Copyright, Trademark, Licenses, Government Grants, Internet Domain Name, Trade Secret, Know How, Research & Development, etc. (GIFT™, 2022). The authors discuss different approaches to assessing the sources of goodwill and the possibility of subjectivity in this process. Along with this, goodwill is considered as a component of intellectual, human, social capital and relationships (Kostyuchenko et al., 2024).

Problems of goodwill valuation and impairment (Lessambo, 2022) focus on the difficulties associated with the valuation of goodwill and the identification of signs of its impairment. Different approaches to determining the market value of goodwill and strategies for identifying its impairment are discussed as potential sources of uncertainty and risks in the works of (Umanska & Lavrova-Manzenko, 2021).

The prerequisites for consolidation of financial statements are discussed by authors (Novikov, 2023; Bezverkhy, 2015) highlight the trends of business globalization, economic integration, optimization of the structure of associations, which in turn put forward a number of requirements for information support of reporting consolidation and development of standards.

Methodology of financial reporting consolidation as literature sources and publications (Pelekh et al., 2021; Kollruss, 2022) consider issues related to financial reporting consolidation, including the definition of control, consolidation methodology and various aspects of recognition and measurement of indicators of combined entities.

Differences between international and national standards, Ukrainian and European legislation in matters of consolidation of financial statements and goodwill accounting – the impact of Directive 2013/34/EU on the need to publish consolidated financial statements of companies and the level of disclosure of information on goodwill, are covered in detail in (Malyshkin et al., 2018). Thus, the authors Malyshkin O., Bezverkhy K. et al. highlight the differences and directions of harmonization of international and national standards on goodwill and consolidation of financial statements, emphasizing the need to resolve these differences to improve the quality and comparability of financial statements.

Current trends, problems and changes in the regulation of consolidation of financial statements – literature sources (Tkachuk et al., 2021) reflect the latest trends and possible changes in the regulation of goodwill accounting and consolidation of financial statements, in particular the use of exceptions to consolidation (Gluzova, 2015).

The research presented in (GIFT™, 2022) underscores the importance of developing approaches to the valuation of goodwill disclosed in consolidated financial statements.

Existing studies focus on the implementation of changes to international standards, peculiarities of presenting consolidated financial statements in Ukraine amidst the state of war (Gnasko & Semenova, 2023), expanding the significance and dissemination of consolidation principles in the preparation of non-financial and integrated reporting by a group of companies – the publication (Korol et al., 2022) provides a forward-looking vision for disclosing information on social responsibility and contributions to sustainable development by parent and subsidiary companies on a consolidated basis.

A common trend in the scientific literature is the search for effective methods and approaches to address issues related to goodwill determination and financial statement consolidation. Additionally, existing developments require further elaboration to enhance the quality of consolidated reporting, supplement goodwill valuation methods, and ensure a higher level of completeness, transparency, and reliability of information to meet users' needs.

The research hypothesis is that to provide a well-founded assessment of goodwill value during financial statement consolidation, existing approaches need to be supplemented with modern methods for determining brand value, measuring long-term sustainability, sustainable development, business social responsibility, and methods based on artificial intelligence. According to international financial reporting standards, forms of capital participation and methods of financial statement consolidation affect the process of goodwill assessment and calculation during business combinations, thus necessitating the supplementation of existing methodological approaches to goodwill assessment, taking into account the interests and needs of investors and managers. This hypothesis asserts that approaches to financial statement consolidation can impact the assessment and calculation of goodwill during business combinations. It anticipates that an analysis of goodwill calculation in the context of applying international financial reporting standards and supplemented methodology will help understand the factors and approaches used in determining the value of goodwill in the business combination process.

The aim of the article is to outline the main procedures and supplement methods for assessing goodwill in business combinations for its further justified disclosure in consolidated financial statements that satisfy the interests and needs of investors and managers.

Research objectives are:

- To characterize the elements of business combination accounting using the acquisition method.
- To analyze the impact of the target entity's capital participation structure on the selection of consolidation methods and procedures.
- To examine the goodwill calculation process during business combination based on a practical example and completes a working table for financial statement consolidation.
- To determine the relationship between internally generated goodwill and externally disclosed goodwill, as well as approaches to goodwill valuation.
- To formulate methodological tools for comprehensive, reliable, and well-founded goodwill assessment. Systematize methods that allow for the analysis and evaluation of a business combination agreement and provide confidence that management has paid a reasonable price, ensuring the adoption of informed decisions and trust in management by shareholders and investors

The research methodology is based on the use of general scientific and special methods of cognition: critical analysis of special scientific literature; systematization of current provisions and requirements of regulatory and legal regulation of financial reporting consolidation, study of the impact of changes in legislation on the process of financial reporting consolidation, in particular in the context of changes related to martial law; economic and mathematical methods and practical approaches to calculating goodwill and its reflection in accounting; comparison of consolidation methods.

Consolidation of financial statements and calculation of goodwill are directly related to the business combination process.

In the main part of the article, the following issues are addressed: the first section provides an analysis of business combination accounting methods as a prerequisite for financial statement consolidation; the second section discusses financial statement consolidation for goodwill determination; the third section is dedicated to analyzing methodical approaches to recognition and disclosure of goodwill; and the fourth section characterizes the main procedures of financial statement consolidation.

1. Business combination as a prerequisite for reporting consolidation

For accounting and reporting purposes, a business combination is defined as the combination of separate business units, or businesses, into a single reporting unit or as a transaction or other event in which an acquirer obtains control of one or more businesses. In this case, a business is an integral set of activities and assets that can be managed to provide goods and services to customers, and to earn investment income, such as dividends, interest, or other income from ordinary activities (IFRS 3, 2023). Identification of the business, in particular through such elements as the resources involved, the technological process and the final product, is important because if the acquired assets are not a business, the accounting and reporting does not reflect a business combination, but rather the acquisition of assets.

To ensure the reliability, appropriateness and comparability of the presentation of information on business combinations and its results in their financial statements, enterprises are guided by the requirements of IFRS 3 "Business Combinations", which defines the principles and conditions for such actions of the buyer as:

- recognition and measurement in the financial statements of assets acquired, liabilities assumed and any non-controlling interest in the acquiree;
- recognition and measurement of goodwill acquired in a business combination or a bargain purchase gain;
- determine the required disclosures to enable users of financial statements to evaluate the nature and financial effect of a business combination.

An entity accounts for each business combination using the acquisition method of accounting. This method requires the identification of elements such as: the acquiring party, the acquisition date, the recognition and measurement of the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree; and the recognition and measurement of goodwill or bargain purchase gain (IFRS 3, 2023) (*Table 1*).

Table 1

Accounting Elements Characteristics for a business combination using the acquisition method

Components of the method	Characteristics
Definition of an acquirer	An acquirer is an entity that obtains control over an acquiree. In a business combination that is achieved through the transfer of cash or assets or the assumption of liabilities, the acquirer is the party that transfers the cash, assets or assumes the liabilities. If the business combination is achieved through the exchange of equity interests, the acquirer is the party issuing the equity interests. This takes into account the largest share of voting rights in the combined entity, the composition of the management body, and the terms of the transfer of equity interests. Additional criteria include the size of the merging entities and the dominance of the party initiating the merger
Determining the acquisition date	The acquirer determines the acquisition date as the date on which it obtains control of the target in accordance with a written agreement or the closing date on which the acquirer legally transfers the consideration, acquires the assets and assumes the liabilities of the target
Recognition and measurement of the identifiable assets acquired, liabilities assumed and any non-controlling interest in the acquiree	The recognition principle means that, as of the acquisition date, an acquirer recognizes, separately from goodwill, the identifiable assets acquired and the liabilities assumed and any non-controlling interest in the acquiree. The assets and liabilities must meet the recognition criteria set out in the Conceptual Framework. At the acquisition date, the acquirer determines the classification and assignment of the identifiable assets acquired and liabilities assumed based on contractual terms, economic conditions, its operating or accounting policies and other relevant conditions existing at the acquisition date. They are measured at fair value (subject to the exceptions in IFRS 3)
Recognition and measurement of goodwill or bargain purchase gain	An acquirer recognizes goodwill at the acquisition date measured as the excess of (a) over (b): (a) the aggregate of the consideration transferred (generally at acquisition-date fair value) or the amount of any non-controlling interest in the acquiree, or in a business combination achieved in stages, the acquisition-date fair value of any equity interest previously held by the acquirer in the acquiree; b) the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed. A bargain purchase gain is recognized if (b) exceeds (a)

Source: compiled on the basis of and processing *(*IFRS 3, 2023; IFRS 10, 2023; Conceptual Framework for Financial Reporting, 2018; IAS 38, 2023*)*.

A business consists of inputs and processes that are applied to those inputs to enable the creation of outputs. Thus, to define a business, IFRS 3 provides guidance for identifying its three elements: inputs, process and outputs.

A business combination can occur in the following ways: (a) one or more businesses become subsidiaries of the acquirer, or there is a legal merger of the net assets of one or more businesses; (b) transfer of net assets of one business or equity interests of its owners to another combining entity; (c) transfer of net assets or equity interests of all combining entities to create a new entity; (d) a group of former owners of one of the combining entities obtains control over the combined entity.

The acquisition of control may result from: the transfer of funds or other assets, the assumption of liabilities, the issue of equity interests, with or without the provision of compensation (including only by contract) (IFRS 10, 2023).

IFRS 3 provides additional guidance on applying the acquisition method to certain types of business combinations (IFRS 3, 2023):

- a business combination achieved in stages or incremental acquisition (e.g., when an entity first acquires a 25% equity interest in another entity that does not provide control, and then an additional 30%, which ultimately provides control over the target), which requires remeasuring its previously held equity interest at fair value with the resulting gain or loss recognized in other comprehensive income;
- a business combination without the transfer of consideration in the following circumstances: the acquiree repurchases its own shares to obtain control; veto rights that prevented the acquirer from controlling the target with a majority of the voting rights expire; or a business combination on a contractual basis without the transfer of control, consideration or equity interests (e.g., a dual-registered stock corporation).

If, in practice, a business combination is achieved without the transfer of consideration, the acquirer must determine the amount of goodwill or bargain purchase gain based on a valuation technique. In this case, the acquirer makes a judgment about the fair value of the acquirer's interest in the target at the acquisition date, instead of the fair value of the acquirer's equity interests transferred as consideration.

IFRS 3 requires the acquiring parent to disclose information for each business combination that occurs during the reporting period. Therefore, the notes to the annual financial statements provide information on the name and description of the investee; date of acquisition; percentage of voting interests acquired; reasons for the business combination and a description of how control was obtained; factors contributing to goodwill; fair value of the consideration transferred in the transaction; amounts recognized as of the acquisition date for each class of assets acquired and liabilities assumed; amount of non-controlling interest in case of acquisition of less than 100% of the subsidiary; other disclosures in case of a step business combination.

2. Consolidation of financial statements

The principles for the presentation and preparation of consolidated financial statements by an entity that controls one or more other entities are set out in IFRS 10 "Consolidated Financial Statements". According to IFRS 10, consolidated financial statements are the financial statements of a group in which the assets, liabilities, equity, income, expenses and cash flows of the parent and its subsidiaries are presented as if they belonged to a single economic entity. A similar definition is contained in Directive 2013/34/EU (Directive 2013/34/EU, 2013). At the same time, The Law of Ukraine "On accounting and financial reporting in Ukraine" (The Law of Ukraine № 996-XIV, 1999) and National Accounting Regulation (Standard) 1 "General requirements for financial reporting" (NAR(S) 1, 2013) define consolidated financial statements as the statements of the controlling entity and the entities controlled by it as a single economic unit.

It should be emphasized that it is the control of the investee that is key to recognizing the investor as a parent, regardless of the nature of its participation in the entity. An investor determines whether it controls an investee if it is exposed to variable returns from its involvement with the investee, has rights to, and is able to affect those returns through its power over the investee. At the same time, power means the existence of existing rights that provide the ability to manage significant activities that significantly affect the results of the investee (IFRS 10, 2023), determine financeal, investment and commercial policies, and control their implementation (NAR(S) 2, 2013).

The ownership interest in the authorized registered capital of an investee determines the form of equity participation and the method of consolidation (*Table 2*).

Table 2

Forms of ownership and methods of consolidation under IFRS

Ownership interest	Nature of influence	Method of consolidation	Participants (entity)	Standard governing
> 50 %	Control	Full consolidation	Group: parent company, subsidiaries	IFRS 10, IFRS 3
20%–50%	Significant impact	Equity method	Associates	IAS 28
< 20%	No material impact	Other investments	Financial asset	IFRS 9
Equal interests of several parties, in aggregate > 50%	Joint control of the contract	Equity method	Joint venture	IFRS 11, IAS 28, IFRS 9

Source: compiled on the basis of and processing (IFRS 3, 2023; IFRS 9, 2023; IFRS 10, 2023; IFRS 11, 2023; IAS 28, 2023; IAS 38, 2023).

A parent consolidates all of the entities it controls. In this case, full group consolidation is applied in accordance with the requirements of IFRS 10 and IFRS 3. If the ownership interest, directly or indirectly (through subsidiaries), is 20% (or more, but not more than 50%) of the voting rights in an investee, the investor has significant influence and such an entity is called an associate. Recognition of significant influence is associated with the power to participate in the financial and operating policy decisions of the investee, but not control or joint control of such policies (IAS 28, 2023). In particular, signs of significant influence may include: representation on the board of directors, participation in the development of policies and decision-making on dividends, significant transacttions between the investor and the associate, exchange of management personnel, provision of technical information. In this case, if significant influence is present, the equity method is applied.

If more than two investors collectively control an investee (i.e., they must act together to control the investee, as each of them does not have individual control), joint control exists, in which case each investor accounts for its interest in accordance with IFRS 11 "Joint Arrangements" (IFRS 11, 2023), IAS 28 "Investments in Associates and Joint Ventures" or IFRS 9 "Financial Instruments" (IFRS 9, 2023).

In accordance with IAS 28 "Investments in Associates and Joint Ventures", the equity method of accounting is a method of accounting under which an investment is initially recognized at cost and subsequently adjusted for changes in the investor's share of net assets of an investee after acquisition. Investor's profit or loss includes the investor's share of profit or loss of an investee, and other comprehensive income includes the investor's share of other comprehensive income of such an investee.

With regard to the definition of an investee, it should be noted that the control assessment is performed at the level of each investee. However, in some circumstances, the assessment may be performed for separate structural units of the entity. Understanding the purpose and characteristics of the investee's activities is necessary to determine how decisions are made, who is able to manage the activities, and who receives the benefits from those activities (Semenova, 2021).

3. Recognition and disclosure of goodwill

IFRS 3 defines goodwill as an asset that embodies future economic benefits arising from other assets acquired in a business combination that cannot be individually identified and separately recognized (IFRS 3, 2023).

An asset can be considered identified if at least one of the following requirements is met:

(a) the asset is separable, i.e., it can be detached or separated from the entity and sold, transferred, leased or exchanged, either separately or together with a contract, a license, an identifiable asset or liability, regardless of whether the entity intends to do so;

(b) the asset arises from contractual or other legal rights, whether those rights are transferable or separable from the entity or from other rights and obligations.

Under IFRS 3, an acquirer discloses information for each business combination that occurs during the reporting period, including the factors that contribute to goodwill, such as expected synergies between the target and acquirer, intangible assets that do not qualify for separate recognition, or other factors.

The procedure for calculating goodwill in a business combination is set out in IFRS 3 (*Figure 1*).

Goodwill arises if the sum of (a) exceeds (b). If the opposite is the case, in which amount (b) exceeds amount (a), then it is a bargain purchase gain. IAS 38 (IAS 38, 2021) defines the accounting for identifiable intangible assets acquired in a business combination. Thus, acquirer measures goodwill at the amount recognized at the acquisition date less any accumulated impairment losses.

Algorithm for goodwill calculation

a) Amount: Consideration transferred *measured* at acquisition date fair value

+

Non-controlling interest in the acquiree

+

Acquisition-date *fair value* of equity interest previously held by the acquirer in the target in a business combination achieved in stages

–

b) Balance of the acquisition-date amounts of *the identifiable assets acquired* and *liabilities assumed* measured at fair value

Figure 1. Goodwill Calculation in a business combination

Source: compiled on the basis of (IFRS 3, 2023).

Consider a practical example of goodwill calculation where a parent company acquired 60% of shares in a subsidiary for EUR 1 200 thousand. At the date of acquisition, the carrying amount of the subsidiary's net assets was EUR 870 thousand and the fair value was EUR 1 050 thousand (revaluation amounted to EUR 180 thousand). To calculate goodwill and determine the non-controlling interest in the allocation of the acquired net assets of the subsidiary, the following amounts should be analyzed:

1) Cost of acquisition (consideration) = 1200.

Carrying amount of net assets of the subsidiary = 1260 – 390 = 870.

Fair value of net assets of the subsidiary = 870 + 180 = 1050.

2) Fair value of net assets acquired = 1050·0.60 = 630.

Goodwill = (1) – (2) = 1200 – 630 = 570.

Equity of the subsidiary = 600+190+80 = 870.

Non-controlling interest (NCI) 40% = 870·0,40 = 348.

Equity of the subsidiary owned by:

- Group = 600·0.60+190·0.60+80·0.60=360+114+48=522.
- NCI = 600·0.40+190·0.40+80·0.40=240+76+32=348.

The revaluation of assets is 180, so 40% of the total amount of asset revaluation 180·0.40=72 should be added to NCI, so NCI = 348+72=420 (EUR thousand).

When preparing the consolidated financial statements, the amount of long-term financial investments, the components of the subsidiary's equity owned by the group, are deducted from consolidated financial statements, and goodwill and the amount of the revaluation of assets to fair value (including the portion attributable to NCI) are added. The remaining items are subject to full consolidation (*Table 3*).

Table 3

Worksheet for preparation of the consolidated balance sheet (statement of financial position)

Items	Parent		Subsidiary		Equity of a wholly owned subsidiary		Eliminations (adjustments)		Consolidated balance sheet	
	Asset	Liabilities and equity	Asset	Liabilities and equity	Group	NCI	Asset	Liabilities and equity	Asset	Liabilities and equity
Cash	2700		390						3090	
Long-term financial investments	*1200*							*1200*		
Property, plant and equipment	9500		870				180		10550	
Goodwill							***570***		***570***	
Total assets	**13400**		**1260**				**750**	**1200**	**14210**	
Liabilities		1200		390						1590
Share capital		7100		600	360	240	360			7100
Additional capital		4800		190	114	76	114			4800
Retained earnings		300		80	48	32	48			300
Non-controlling interest (NCI)								*72*		*420*
Total liabilities and equity		**13400**		**1260**	**522**	**348**	**522**	**72**		**14210**

Source: compiled on the basis of and processing (IFRS 3, 2023; IFRS 10, 2023; Fomina et al., 2023; Kostyuchenko et al., 2021; IFRS 12, 2023).

According to the Chart of Accounts for Accounting for Assets, Capital, Liabilities and Business Transactions of Enterprises and Organizations and Instructions for its Application (MinFin of Ukraine, 1999), account 19 "Goodwill" is used to account for goodwill with subaccounts: 191 "Goodwill on acquisition" and 192 "Goodwill on privatization (corporatization)". The debit of the account reflects the value of goodwill arising from the acquisition of another company (during privatization/corporatization), while the credit reflects losses from impairment of goodwill and its write-off. The debit of account 19 corresponds to the following accounts: 14 "Long-term financial investments", 37 "Settlements with various debtors", 68 "Settlements on other transactions"; credit – with accounts: 14, 37, 68, 45 "Capital withdrawal", 97 "Other expenses".

Goodwill is not subject to amortization but is tested for impairment in accordance with IAS 36 "Impairment of Assets" (IAS 36, 2023).

Goodwill arising on the acquisition of businesses is carried at cost at the acquisition date less accumulated impairment losses, if any. For the purpose of impairment testing, goodwill is allocated to each of the group’s cash-generating units based on the expected future benefits to be derived from the synergies of the combination. A cash-generating unit to which goodwill has been allocated is tested for impairment at least annually. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit on a pro rata basis based on the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods. On disposal of a cash-generating unit, the amount of goodwill associated with the operation is included in the determination of the gain or loss on disposal.

Thus, goodwill recognized in a business combination is an asset that reflects future economic benefits. Sources of goodwill may include certain synergies after the business combination, expansion into other markets, and organizational capital (Demyanova & Semenova, 2022). However, this approach to identification and measurement is not entirely justified, since, according to IFRS 3, goodwill under the accounting approach can arise only on acquisition. It is also called external, disclosed goodwill (Lessambo, 2022).

According to IAS 38 (IAS 38, 2023), internally generated goodwill is not recognized as an asset because it is not an identifiable resource controlled by the entity and can be reliably measured at cost. However, it needs to be evaluated and taken into account in management accounting in order to build internal potential, environmental and intellectual capital, and competitiveness of the enterprise, which will contribute to the generation of internal goodwill and, if necessary, increase external goodwill arising from business combinations or sales of companies.

For the internal goodwill accounting, it is recommended to supplement the existing list of accounts with an additional subaccount 193 "Internal goodwill". In this case, analytical subaccounts should be provided for this account, for example: Human assets, Personal internal goodwill of the head, Client assets ("Client assets. Suppliers", "Client assets. Buyers", "Client assets. Potential buyers"), Intangible assets related to contracts ("Non-compete agreements", "Confidentiality agreements", "Favorable employment contracts", "Favorable insurance contracts", "Supplier agreements", "Buyer agreements"), Organizational assets ("Own software", "Organizational assets. Marketing", "Certificate of conformity of products", "Non-patented technologies", "Non-patented recipes"), Social assets, Environmental assets (Zadorozhnyi et al., 2021). However, the proposed analytical subaccounts will more satisfy the needs of internal management reporting than disclosure of information for external users. Since the current IFRS and IAS do not have appropriate mechanisms for the assessment and accounting of such objects. Objects that affect internally generated goodwill do not fully meet all the criteria for asset recognition provided for in the standards, which complicates the practice of goodwill valuation.

Approaches to defining external and internal goodwill differ. Internally generated goodwill is assessed by the enterprise, its accounting staff, managers, owners. External goodwill, which is disclosed in consolidated financial statements, is assessed by the investing enterprise, which is the buyer and ultimately acts as the parent company. It is the buyer – the parent company in the consolidated statements that discloses information about the expected synergy from the acquisition, intangible assets that do not qualify for separate recognition, and other factors forming goodwill. The relationship between goodwill disclosed in consolidated financial statements (external goodwill) and internally generated goodwill as evaluation objects is more clearly presented in *Figure 2*.

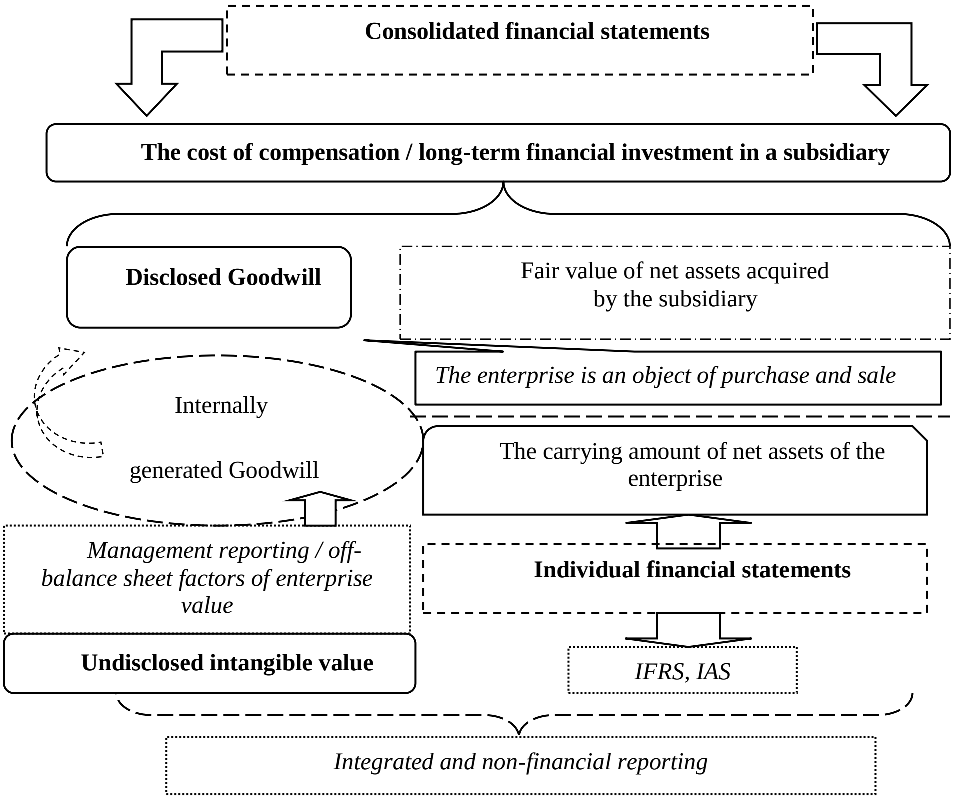

Figure 2. The relationship between disclosed goodwill in the consolidated financial statements, internally generated goodwill, and undisclosed intangible value

Source: compiled by the author.

It is important to underline that goodwill arising from business combinations and reflected in the consolidated financial statements depends on the purchase price, i.e., the compensation agreed upon by both parties when the enterprise is subject to acquisition, as well as the fair value of the acquired net assets. At the same time, these indicators, as well as the formation of expectations from the acquisition of a subsidiary, are significantly influenced by external environmental factors at the specific time of investment and business combination.

There is a need to shift the focus of goodwill assessment presented in the consolidated financial statements. It is essential to understand that goodwill arises essentially at the moment of concluding the business combination agreement and becomes visible in the consolidated financial statements. Goodwill is determined not so much by the difference between the compensation amount and the purchase price but rather by the willingness and consent of the buyer to pay more than the current balance sheet value of the investment object. The amount of goodwill is determined by the investor's vision and expectations from the business combination, from the arguments and evidence of what the acquisition of the subsidiary will bring to the group. Therefore, the methodological toolkit for goodwill assessment should be significantly broader and more diverse and not limited to IFRS. Thus, for goodwill assessment, the methodology defined in IFRS for disclosed goodwill needs to be supplemented with methods that allow for a comprehensive examination of the components and factors that shape the added invisible value of the company, expressed as goodwill.

A thorough analysis of scientific literature, goodwill assessment practices, and current trends and opportunities has allowed for the identification of four additional methodological approaches to goodwill assessment (*Table 4*).

Table 4

Complementary methods of goodwill evaluation

The methodological approach	Characteristics of the methodological toolkit
Methodology based on brand valuation for clients	*The discounted cash flow (DCF)* method evaluates goodwill by considering the projected future cash flows of the company, stemming from its constant value for customers and consumers. This may include customer loyalty, a strong brand reputation, and other factors contributing to revenue stability. *The Transaction Multiples Method* compares estimated brand values with similar companies in the market that have analogous enduring value for customers. This may require an analysis of brand value, reputation, and other factors influencing customer relations. *The Excess Earnings Method* assesses goodwill based on the profitability it generates through its enduring value for customers. It relies on estimating future excess earnings expected to be generated by the company due to loyal customers, as well as the avoidance of costs associated with acquiring new customers. *The Market Price Method* utilizes the market price of the company's stock and analyzes the difference between the market price and the company's book value to determine the value of goodwill. This can be an effective method, especially for publicly traded companies where the market price of the stock reflects the overall market assessment of the company's brand and reputation
Assessment of the Company's Long-Term Stability	*Financial analysis* includes approaches based on using financial indicators to analyze solvency, liquidity, and financial stability of the company, as well as assessing the company's ability to withstand stressful situations such as economic downturns, changes in market conditions, risks, sanctions, etc. *Stress tests* allow testing the company's response to various stress scenarios. This may include modeling economic crises, military risks and their consequences, changes in market conditions, losses from the loss of key clients, etc., and assessing the impact of these scenarios on the company's financial indicators and its readiness to survive in such conditions. *Operational resilience analysis* evaluates operational efficiency and management effectiveness under stress conditions. It may include analysis of operational processes, inventory management, quality assurance, risk management, etc. *Strategic risk management analysis* identifies and evaluates strategic risks that can affect the company and its readiness for and ability to effectively manage risks. This method includes evaluating risk management strategies, the presence of crisis and emergency business plans (e.g., in wartime), responding to changes in legislation, etc. *Socio-economic analysis* assesses the company's relationships with its stakeholders, including customers, consumers, employees, investors, the public, etc. This method relies on analyzing the company's reputation, stakeholders' interest in its success, and determining the company's ability to maintain these relationships in turbulent conditions

End of the Table 4

The methodological approach	Characteristics of the methodological toolkit
Assessment of goodwill considering aspects of sustainable development and social responsibility	*The Earnings Multiplier Method* allows for the valuation of goodwill based on a company's income metrics, taking into account not only current profit but also its projected dynamics, considering social and environmental factors. *The Market Comparable Method* involves comparing the goodwill value of the subject company with that of similar enterprises in the market, taking into account various social and environmental indicators such as the degree of environmental efficiency, the level of social programs, management efficiency, and so forth. *The Social Valuation Method* aims to incorporate social value based on indicators of the company's social responsibility activities. This method utilizes various approaches, including assessing contributions to environmental conservation, improvements in working conditions, promotion of social development, and more. *Integrated Sustainability Assessment* relies on an approach that considers a broad spectrum of environmental, social, and economic (ESG) indicators to assess the impact of a company's activities on sustainable development, allowing the evaluation of goodwill as part of the overall social and environmental value of the company. *Internal assessment Methods* include analyzing the company's internal processes, such as risk resilience, resource management efficiency, and employee engagement with sustainable development and social responsibility goals. *External assessment Methods* include analyzing external factors such as consumer, investor, government, and NGO reactions to the company's activities in the context of sustainable development and social responsibility. *The Triple Bottom Line Method* enables the determination of goodwill formation by measuring a company's impact on profit, people, and the planet, assessing the company's financial performance (profit), social aspects (people), and environmental impact (planet). *The Stakeholder Approach Method* focuses on identifying and evaluating the company's impact on all interested stakeholders, including consumers, employees, investors, NGOs, and government agencies, thus taking into account the interests of these groups in assessing the company's goodwill. *The Social Gross Domestic Product (SGDP) Method* determines a company's gross contribution to social development, including support for labor standards, consumer rights protection, support for local communities, environmental stewardship, volunteer initiatives, and other social aspects
Using Artificial Intelligence for Goodwill Valuation	*Analysis of large volumes of data (Big Data)* using AI allows for processing large volumes of data from various sources, such as social media, news, customer feedback, and others, to identify patterns and trends indicating the level of goodwill of the company. *Natural Language Processing (NLP)* for analyzing textual data, such as customer reviews, comments on social networks, etc., to identify sentiments, emotions, and overall attitudes towards the company. *Machine Learning* based on historical data about the company, including financial and non-financial reports, stock value dynamics, brand ratings, etc., to develop models that can predict the future value of goodwill. *Analytics of video and image data* from advertising campaigns, events, exhibitions, and other sources allows to understand how the company is perceived by consumers and accordingly its value to consumers. *Decision Support Systems* provide recommendations for management strategies that can enhance the company's goodwill

Source: compiled on the basis of and processing (Fomina et al., 2023; Hargrave et al., 2024; Kollruss, 2022; Kostyuchenko et al., 2024; Pelekh et al., 2021; Voloshenko, 2020).

At a time when the methodology for goodwill measurement in preparing consolidated financial statements is clearly defined by International Financial Reporting Standards, a second complementary group of goodwill valuation methods can be applied by investors to assess potential acquisition targets and manage company value by management. A systematic approach includes the following approaches: brand valuation for clients, measuring the long-term stability of the company, evaluating considering indicators of sustainable development and social responsibility, goodwill valuation methods based on artificial intelligence capabilities.

Each of the proposed groups of methods has its advantages and limitations. For instance, the use of artificial intelligence for goodwill assessment can provide companies with a more accurate and objective understanding of their reputation and market value. However, it is also important to consider ethical aspects and data confidentiality protection when using such technologies. The development of goodwill valuation methods takes into account the long-term stability of the company under stressful situations, such as economic crises or changes in market conditions. This may include the development of models that assess risks and reserve opportunities to determine goodwill stability.

Goodwill assessment, considering its lasting value for clients and consumers, can be important in the context of many businesses, especially those based on customer relationships, innovation, product or service quality, brand reputation. Goodwill assessment, considering aspects of sustainable development and social responsibility, is becoming increasingly important for companies in the modern world. This approach reflects the general trend towards considering environmental, social, and corporate aspects in decision-making processes. These methods can be applied separately or in combination, depending on the specific situation and characteristics of the business. The proposed methodological approaches can help improve the accuracy and objectivity of goodwill assessment, which in turn will contribute to better management decision-making and increased trust from market participants.

Goodwill is an asset that reflects the difference between the value of the company as a whole business and the sum of the values of individual assets. Its assessment is important for financial reporting and investment decision-making.

Analysis shows that disclosed goodwill accounts for a significant portion of the value of the combined business, with its size reaching USD 133 billion in 2022 (for AT&T – *Table 5*). For example, the disclosed goodwill of AB InBev amounts to USD 116 billion or 61% of the company's value. The share of disclosed goodwill is 52% in Bayer, 45% for Sanofi and AT&T, 43% for CVS Health, 42% for BAT (GIFT™, 2022). It is noticeable that among the top 20 companies in the world by the value of disclosed goodwill, the overwhelming majority belong to the United States. By types of activity, Pharma, Healthcare, Technology & IT, Internet & Software, Media, Banking dominate.

Table 5

Top 20 Companies Worldwide by the Amount of Disclosed Goodwill in the Consolidated Financial Statements for the Year 2022

Rank	Name	Country	Industry	Disclosed Goodwill (USD bn)	Enterprise Value (USD bn)	Disclosed Goodwill/ Enterprise Value
1	AT&T	United States	Telecoms	133	298	45%
2	AB InBev	Belgium	Drinks	116	190	61%
3	CVS Health	United States	Retail & Food Retail	79	184	43%
4	Disney	United States	Media	78	245	32%
5	UnitedHealth Group	United States	Healthcare	76	523	15%
6	Berkshire Hathaway	United States	Insurance	74	865	9%
7	Comcast	United States	Media	70	229	31%
8	Bank of America	United States	Banking	69	396	17%
9	BAT	United Kingdom	Tobacco	58	137	42%
10	IBM	United States	Technology & IT	56	169	33%
11	Sanofi	France	Pharma	55	123	45%
12	Raytheon Technology	United States	Aerospace & Defence	54	172	31%
13	JP Morgan Chase & Co	United States	Banking	50	487	10%
14	Microsoft	United States	Internet & Software	50	1701	3%
15	Pfizer	United States	Pharma	49	277	18%
16	Bayer	Germany	Pharma	46	89	52%
17	Cigna	United States	Healthcare	46	128	36%
18	Oracle	United States	Internet & Software	44	289	15%
19	Broadcom	United States	Technology & IT	43	223	19%
20	Thermo Fisher	United States	Healthcare	42	229	18%

Source: compiled on the basis of and processing (GIFT™, 2022).

Overall, these examples demonstrate the significant role that goodwill can play in business combinations, especially when it comes to acquiring valuable intangible assets such as brands, intellectual property, and customer bases. However, it is important to note that the success of these transactions can vary greatly depending on a range of factors, including market conditions and management decisions. The significant proportion of goodwill value disclosed in the consolidated financial statements indicates an imperfect mechanism for assessing business value today, noticeable divergence between book value and market value, and the presence of undisclosed intangible assets whose value is increasing (*Figure 3*).

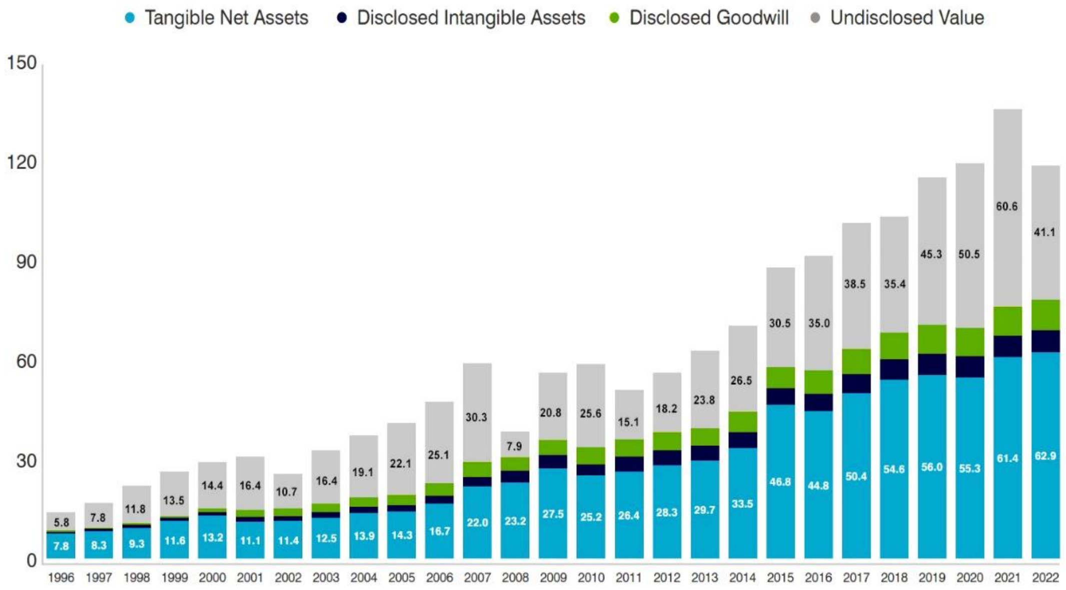

Figure 3. The global trend of the composition of value and Disclosed Goodwill (USD trillion)

Source: (GIFT™, 2022).

The value of undisclosed intangible assets, including internally generated goodwill, is noticeably increasing, indicating a growing deviation in the fair market value of the business compared to disclosed assets on the balance sheet. Modern accounting practice does not recognize internally generated intangible assets, except for acquired ones. The definition of an intangible asset by IFRS requires its non-monetary nature and identification. Since the beginning of 2001, IFRS has required a breakdown of the cost of intangible assets acquired through business combinations into various categories, such as those related to customers and the market. However, only acquired assets can be reflected on the balance sheet, complicating the assessment of the true value of the company. Considering this, enterprises must systematically assess all their assets and liabilities, including undisclosed intangible assets (GIFT™, 2022).

Thus, undisclosed intangible assets represent assets that are not reflected in a company’s financial statements but may have significant value and impact on the market value of the enterprise. This category includes "internally generated goodwill" and the difference between the market value of the business and the value of its physical and identified intangible assets (GIFT™, 2022). Although internally generated goodwill is not formally recognized as an intangible asset, it is a controlled resource expected to bring future economic benefits.

Therefore, regardless of accounting standards requirements, companies must regularly assess all their tangible and intangible assets, including internally generated ones such as goodwill, brands, and patents, intellectual, social, and environmental capital, reflecting additional value that new management can create (GIFT™, 2022).

4. Consolidation procedures

A parent company prepares consolidated financial statements using uniform accounting policies for similar transactions and other events in similar circumstances. IFRS 10 sets out the requirements for the preparation of consolidated financial statements by parent entities that are related to the recognition of control, and also provides a list of conditions that allow a parent entity not to present consolidated financial statements (*Figure 4*).

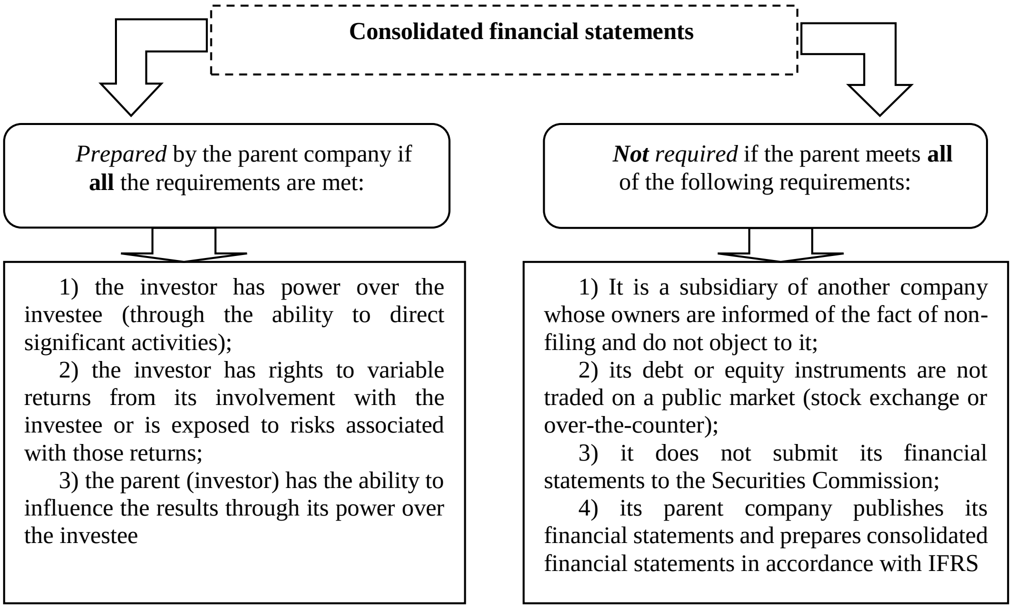

Figure 4. Requirements for the preparation of consolidated financial statements

Source: compiled on the basis of (IFRS 10, 2023; NAR(S) 2, 2013; Fomina et al., 2023).

If the consolidated financial statements are not prepared, information users cannot analyze goodwill because goodwill is an attribute of consolidated financial reporting. This underscores the relevance of the request for disclosure of goodwill information in integrated reporting (Kostyuchenko et al., 2024) or other forms of non-financial reporting of the enterprise.

Consolidation of an investee begins from the date when the investor obtains control over the investee and ceases when the investor loses control.

Paragraphs B86-B93 of IFRS 10 provide guidance on the preparation of consolidated financial statements. Thus, the *procedures* for consolidating financial statements include:

I. Combining similar items of assets, equity, liabilities, income, expenses and cash flows of the parent company with similar items of its subsidiaries.

II. Reduction (elimination) of the carrying amount of the parent's investment in each subsidiary and the parent's share of the equity of each subsidiary.

III. Elimination of all intra-group assets, liabilities, equity, income, expenses and cash flows between group entities. Profits or losses arising from intra-group transactions and recognized in assets (inventories, fixed assets) are completely excluded (Kostyuchenko et al., 2021). Intragroup losses may indicate an impairment that should be recognized in the consolidated financial statements. IAS 12 "Income Taxes" (IAS 12, 2023) addresses temporary differences arising from the elimination of profits or losses resulting from intra-group transactions.

Thus, subsidiaries, which are entities in which the Group has an interest, directly or indirectly, of more than one half of the voting rights or otherwise has the ability to exercise control over their activities, are fully consolidated in the consolidated financial statements. If the parent company owns 100% of the voting rights of a subsidiary, no non-controlling interest is calculated (Fomina et al., 2022; Semenova, 2021). In accordance with IFRS 12 "Disclosure of Interests in Other Entities" (IFRS 12, 2021), an entity discloses information to evaluate the nature of its interests in other entities, the risks associated with those interests, and the effects of those interests on its financial position, cash flows, and performance. In particular, the consolidated financial statements provide information on the composition of the group, the volume and balances of intra-group transactions, and their impact on the group's results.

Conclusions

For business owners, investors, and managers, it is important to understand the potential impact of intangible factors on the value of the business, which are not disclosed in the financial statements but materialize in the form of goodwill during business combinations and consolidation of financial statements. It is during business combinations that internally generated goodwill, formed by off-balance sheet factors of business value, becomes a fully recognized asset, assessed, and disclosed in consolidated reporting.

Consolidated financial statements show how the combined business operates, financial position, composition of property, ratio of liabilities, equity structure, cash flows, income and expenses, and profits of companies belonging to the group. The peculiarity of consolidated reporting is that the parent and subsidiaries are separate legal entities that maintain accounting records and prepare separate financial statements in accordance with the principle of autonomy. However, for consolidation purposes, the results of the group are presented as if they were a single economic unit. The methodology and procedures for preparing consolidated financial statements require compliance with a number of rules, including making adjustments, eliminating intra-group transactions and balances from the primary financial statements and disclosing them in the notes to the consolidated financial statements. The responsibility for preparing and presenting consolidated financial statements rests with the parent company, which prepares the worksheets and makes the necessary adjustments for consolidation purposes outside its own accounting system.

Goodwill and non-controlling interest are integral attributes of consolidated financial statements. The uniqueness of goodwill is that it reflects the immeasurable aspects of the business, the expected added value of the investee company. Goodwill is an important element in the consolidated financial statements as it affects the ultimate financial position of the Group. Goodwill reflects the strategic value that a company attaches to a particular asset or entity under its control. However, it may also be subject to impairment if its value can no longer be justified by expected future earnings. Therefore, goodwill in consolidated financial statements is an important aspect, as it reflects the intangible factors of a business's value that can significantly impact the overall resilience and efficiency of the company in competitive business environments.

The categorization of two groups of goodwill valuation methods allows for consideration of the interests and needs of various parties conducting such assessments. The first group of methods is designed for assessing disclosed goodwill during business combinations and consolidation of financial statements. The second group of goodwill valuation methods enables a thorough analysis of the value created by the company in its operations, the value of internal goodwill considered during subsidiary acquisition agreements, and the company's ability to generate goodwill for impairment testing. Management's own assessment of business value, including goodwill value, subsequently requires annual review and substantiation based on evidence and calculations proposed by the methodology to support their assumptions.

Therefore, the proposed hypothesis is substantiated, and for a justified valuation of goodwill during consolidation, the use of such methodological approaches is necessary: assessing brand value for customers, measuring long-term company stability, evaluating sustainability and social responsibility indicators, goodwill valuation methods based on artificial intelligence capabilities.

Thus, the scientific novelty lies in defining and grouping methodological approaches to assessing the value of goodwill, in accordance with the requirements of IFRS for disclosure in consolidated financial statements and accompanying notes, as well as in the group of additional methods that investors can utilize regarding potential acquisition targets and management during company value management.

Goodwill is unique in that it is assessed not only during acquisition. The proposed methodology will be useful for testing goodwill impairment for further financial statement consolidation, as well as for evaluating all aspects of internally generated goodwill formation. Currently, information about goodwill can be disclosed in more detail in the notes to the consolidated financial statements, as well as in other forms of non-financial reporting, including management reports and integrated reporting.

Prospects for further research include deepening knowledge and experience in the field of non-financial statement consolidation; improving international accounting and reporting standards; more comprehensive disclosure of goodwill formation aspects; analysis of the relationship between internally generated goodwill and the amount of externally disclosed goodwill during consolidation. Ultimately, this will allow financial statement users to obtain more comprehensive information about the group's activities and the impact of off-balance sheet factors on business value and the amount of goodwill.

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