

**IMPLEMENTATIONS ON IDENTIFICATION AND REPORTING OF GOODWILL
IMPAIRMENT (VALUE LOWNESS) IN TURKISH ACCOUNTING STANDARTS: A
RESEARCH ON THE BUSINESSES IN THE ISTANBUL STOCK EXCHANGE**

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Abstract

According to the Turkish Accounting Standards, it has been stated that impairment test must be done to report declines in the value of goodwill. The aim of this study is to put forward the impairment (value lowness) implementations of businesses related to goodwill in Turkey. Accordingly, the content of the reports on the goodwill in the companies which were traded in BIST (Istanbul Stock Exchange) between the years 2018 – 2020 has been analyzed. At the end of the research, it has been found out that some companies corrected their goodwill values according to the impairment test results. Nevertheless, it has also been identified that many companies drew their reports by going for a reduction in goodwill value without carrying out an impairment test. Optional non-standard implementations can cause errors and wrong judgements by decision makers. In order to eliminate this negative situation, compulsory, simple, understandable, and lower cost arrangements are needed in the Accounting standards.

Keywords: Goodwill, Impairment Test, Stock Market Istanbul.

Jel Kodları: M40, M41, D53.

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TÜRKİYE MUHASEBE STANDARTLARINDA ŞEREFİYE DEĞER DÜŞÜKLÜĞÜNÜN TESPİTİ VE RAPORLAMASINA İLİŞKİN UYGULAMALAR: BİST’TE YER ALAN İŞLETMELER ÜZERİNE BİR ARAŞTIRMA

Öz

Türkiye Muhasebe Standartlarına göre şerefiye varlığında meydana gelecek düşmelerin raporlanmasında değer düşüklüğü testinin yapılması gerektiği belirtilmiştir. Ancak bu testin yapılması isteğe bırakılmıştır. Bu çalışmanın amacı, Türkiye’deki işletmelerin şerefiye ile ilgili değer düşüklüğü uygulamalarını ortaya koymaktır. Bu doğrultuda 2018-2020 yılları arasında hisse senetleri İstanbul Borsasında (BİST) işlem gören şirketlerde şerefiye ile ilgili yapılan raporlamaların içerikleri analiz edilmiştir. Araştırma sonunda, bazı şirketlerin değer düşüklüğü testi sonuçlarına göre şerefiye tutarını düzelttikleri tespit edilmiştir. Ancak çok sayıdaki şirketin herhangi bir değer düşüklüğü testi yaptırmadan şerefiyede indirim yaparak raporladıkları bilgisine ulaşılmıştır. İsteğe bağlı olarak değişen standart dışı uygulamalar karar vericiler açısından çeşitli yanlışlıklara ve hatalı kararların verilmesine neden olabilmektedir. Bu olumsuzluğun ortadan kaldırılabilmesi açısından, Muhasebe standartlarında; uygulaması zorunlu, sade, anlaşılabilir ve daha az maliyetli düzenlemelerin yapılmasına ihtiyaç vardır.

Anahtar Kelimeler: Şerefiye, Değer Düşüklüğü Testi, Borsa İstanbul.

Jel Codes: M40, M41, D53.

1. INTRODUCTION

One of the most effective ways for businesses to enter new markets and increase their market shares in a short time is to incorporate a business operating in that market. For this purpose, it is usually tried to take advantage of vertical or horizontal growth by purchasing businesses in the same or different countries. In addition to the desire to enter new markets rapidly, rising competition escalates business purchases. Besides the competition, the rapid progress in the technological field encourages this situation. In this way, the idea of increasing market share, being protected from competition, increasing company value and increasing profits in a shorter time with less cost and easily encourages mergers through buying. In addition, through acquisitions or mergers, businesses can use their assets more effectively and provide competitive advantage by eliminating the negative effects of working in insufficient capacity.

According to the Accounting Standards, goodwill resulting from the payment of a higher value than the net assets of the acquired business is reported in the balance sheet as an asset item. Except for the acquisition or merger, the brand value created within the business cannot be recorded and reported. This situation causes the rapid widening of the gap between the market value and book value of the enterprises, especially in recent years. Since the acquisition or merger transactions are realized as a result of the bargaining and agreement of the parties, the first recording and reporting of the goodwill at this stage is realistic. However, it is extremely problematic to maintain and report the fair changes that occur over time in the

asset of goodwill. For this reason, the careful monitoring and accurate reporting of this issue is of great importance. According to Turkish Accounting Standards, it is stated that the impairment test is necessary in the reporting of the decrease in the goodwill asset. However, this test is optional.

The difference between the reported values of the financial position, the cost of having this test done and the subjective behaviors in valuation, financial success of the enterprise and their fair values gradually widen as the goodwill impairment test is left optional,

In this study, the contents of the reports on goodwill in companies whose shares are traded on the Istanbul Stock Exchange (BIST) in Turkey between the years 2018-2020 have been analyzed. It has been determined that some companies traded on the BIST have adjusted the goodwill amount according to the results of the impairment test they have made. However, it has been found out that many companies report goodwill with discount and without having any impairment test. Non-standard applications that differ on demand can cause various mistakes and wrong decisions on the side of decision makers. In order to eliminate this unfavorable situation, there is a need for mandatory, simple, understandable and less costly regulations in accounting standards.

2. THE CONCEPT OF GOODWILL AND FACTORS BRINGING OUT GOODWILL

Major changes have started to be experienced in the composition of the assets that businesses must have in order to continue their existence, especially with the effect of technology. In the past, while tangible fixed assets in industrial enterprises and current assets in trade and service enterprises held an important place, intangible assets were realized in negligible amounts.

In today's economic world, knowledge is considered as the most important component and building blocks of any business activity. In this new era, the main sources of wealth and wealth creation are based on knowledge and knowledge based work rather than using human power and natural resources. For this reason, businesses that invest more in intangible assets over time have gained competitive advantages.

By the end of the 1900s, the significance of intangible assets among the assets owned by the enterprises have begun to increase. The heftiness of factors such as the professionalism of the management staff of the enterprise, the commitment of the employees to the enterprise, the steps taken in the context of corporate governance, the raise in business skills, and the increase in the level of technical knowledge have multiplied day by day.

Businesses successful in these areas have gained a competitive advantage and augmented their profitability and market values. Businesses that rely mainly on physical assets and cannot change their old business habits have not been able to grow and compete in this changing economy.

The ratio of the intangible assets owned by the enterprises to their tangible assets is increasing rapidly nowadays and causes the widening of the gap between the book value and the market value of the enterprises. This difference between book value and market value is called Intellectual Capital (Çelik & Perçim, 2000, p. 112).

In short, such advantages called which are intellectual capital; together with increasing the performance of the enterprise, they come to the forefront in providing competitive advantage to the enterprises, which is difficult to imitate and substitute by other enterprises because it has unique characteristics of the enterprise. Especially in technology companies, it is seen that the value of the companies is defined by intangible intellectual assets rather than tangible and financial assets. Instead of tangible assets such as cash assets, buildings and machines, which reach high amounts as in the past, intangible intellectual capital elements have started to become priority. In the symposium organized by the Organization for Economic Cooperation and Development in 1999 on the measurement and reporting of intellectual capital, it was stated that the importance of intangible assets or intellectual capital as a key element in economic growth and social progress has increased (Petty & Guthrie, 2000, p. 156-157).

While Sullivan says that intellectual capital, which constitutes the essence of goodwill, is "knowledge that can be converted into profit and consists of two components as human capital and intellectual assets (1998: 5); Organization for Economic Cooperation and Development defines intellectual capital as "intangible elements owned by businesses, in other words; it defines it as the total financial value of structural capital, customer capital and human capital (Nerdrum & Ericson, 2001, p. 127).

Assessing the value of intellectual capital components in a fair way, following the changes in this value over time and reporting them in financial statements contain major problems as well.

Intellectual capital value comprises assets that do not appear in current financial statements. The contribution of intellectual capital to the market values of enterprises, as in many other fields, has caused this value to become a remarkable research topic in the field of accounting and finance. Researchers, academics, investors and managers are continuously working to

explain the difference between the market values of businesses and their book values. This difference in accounting science has been tried to be explained with the concept of goodwill for many years, but it has been seen that goodwill is not adequate to explain this distinction because of the fact goodwill is only considered in business combinations or in case of sales of businesses. As a result, in order to adapt to the knowledge economy, it has become a necessity for businesses to determine and measure the intellectual capital values they have and to report the changes in this value in terms of accounting science (Sarıay & Özulucan, 2019, p. 15).

International Accounting Standards Committee (IASC) considered intellectual capital as intangible assets and defined it as a whole consisting of brands, trademarks, computer software, licenses, copyrights, patents, franchise agreements, service and production rights, prototypes and formulas (Johanson, 1999, p. 7).

Goodwill has become a fundamental part of the balance sheets of most international companies, especially technology companies. In these firms, the gap between the market value of the firm and the value of the total assets is increasing gradually. Google purchased Motorola for \$12.5 billion in 2012, which is twice the assets of Motorola with total assets of approximately \$6.3 billion.

Goodwill is the portion of the merger cost remaining after accounting for the identifiable assets, liabilities and contingent liabilities of the acquired company. According to this goodwill can be formulated as follows (Gökçen et al., 2006, p. 30).

Goodwill = Purchase Price (Merger Cost) - Fair Value of Net Assets Acquired

The most important feature of goodwill is the fact that it emerges depending on other asset items and cannot be bought and sold alone (Yardımcıoğlu, 2007, p. 64). Because of this feature, unlike other assets, goodwill is a unique asset (Kızıl et al., 2013, p. 362).

Goodwill exists if the merger cost is bigger than the fair value of the acquired assets. It is recognized as an asset and is tested for impairment. Otherwise, if the cost of the merger is less than the fair value of the acquired assets, there is negative goodwill (merger profit). The acquiring company reflects the merger profit directly to the nominal accounts and includes it in the profit-loss for that period.

In the calculation of goodwill, acquired company assets should be calculated at fair value. How to determine the fair value complicates the application, so the accounting standard requires the use of valuation methods. These methods reveal the subjectivity in valuation.

While trying to reach the true information, this situation gives way to subjectivity. The subjectivity of information also facilitates the application of creative accounting techniques (Örten et al., 2020, p. 704).

From another point of view, goodwill is also defined by the "excess profit" approach. According to this approach, goodwill is defined as the present value of the expectation of abnormal profits over many years. In this view, goodwill is the difference between the present value of normal earnings on identifiable net assets and the present value of abnormal earnings. However, this process requires estimating the future normal and abnormal earnings and discounting them with an appropriate discount rate (Cemalcılar and Erken, 1999, p. 450).

Goodwill value and goodwill value accounting began to be of public interest of Lehman Brothers in 2008 during the global financial crisis followed by the bankruptcy of the American Investment Bank (Agnes and Rüttler, 2013, p. 5). As a matter of fact, the information given regarding the United States of America reveals the extent to which the subject of goodwill is open to abuse.

The CFO of Kraft Heinz Co. wrote a goodwill impairment of \$7.3 billion on its financial statements last year, and then in response to this news, the company's shares fell by \$13.23. "General Electric Co. had written off 22 billion dollars' goodwill impairment expense in the previous year. Calcbench Inc. company, the goodwill amount in the balance sheets of publicly traded companies in the United States market is 5.5. over a trillion dollars according to the information compiled by the company from the financial statements of the company as of the end of September. It is seen how massive the figure to be recorded as expense in the income statement in the impairment of goodwill can be (Gedik, Dünya Gazetesi, 31 January 2020).

3. THE EMERGENCE OF GOODWILL, RECOGNITION AND REPORTING

One of the most important tasks of accounting is to present the financial data related to the business in a timely and truthful manner to meet the needs of information users. However, the problems experienced in the processes of recording, classifying and summarizing the elements of intellectual capital in the accounting information system, together with the measurement problems, cause the financial statements to move away from reflecting the real financial situation and financial performance of the enterprise, and as a result the expectations from accounting cannot be met.

Researchers, academics and consultancy companies, especially interested in accounting and finance, have started to work on the reporting of intellectual capital in financial statements

with the definition of intellectual capital, determination of its elements and scientifically revealing its measurability. It contains intangible elements in Intellectual capital, which causes the emergence of goodwill. Since there is no generally accepted clear consensus on measuring the financial values of the intangible elements of intellectual capital, it has not been possible to present these elements in a meaningful way within the current accounting system (Sariay and Özulucan, 2019, p. 22).

The current accounting system, which is based on historical values, has been developed to enlighten information users about the financial status and financial performance of businesses. Most of the data obtained by information users is numerical and has been produced in accordance with the basic concepts of accounting and generally accepted accounting principles. When intellectual capital is examined, it is a concept that contains very dense abstract information and a concept which is not very easy to understand (Önce, 1999, p. 65).

Due to the difficulties experienced in measuring and detecting intellectual capital investments, the accounting system in use generally characterizes these elements as losses and expenses. From the accounting point of view, the higher the intellectual capital investments in the enterprises, the higher the loss of the enterprises. However, the intellectual capital investments of the enterprises do not decrease the market value of the enterprises, on the contrary, they increase it (Gökmen, 2003, p. 110-118).

In general, three different methods of reporting intellectual capital have been suggested. According to the first method, intellectual capital is reported as an intangible asset. The assets that make up the intellectual capital are not different from other assets owned by the business and should therefore be presented in the financial statements. For the second method; intellectual capital should be presented as a supplement to the entity's existing financial statements. The third method is the mixed approach, which proposes that some of the intellectual capital should be included in the traditional reporting system and some of it should be presented in separate reports (Erkuş, 2004, p. 313-314).

Intangible assets have become increasingly important elements of the success of business operations. Due to the economic importance of intangible assets, measurement and reporting of such assets have an important place in the investments of the companies. Besides, as a result of the limited information available about the investments made in these assets, it attracts significant attention from professional organizations, entrepreneurs, accountants and investors. In addition, accounting and reporting of intellectual capital contributes to a

development in this direction by triggering the calculation of intangible assets and the solution of other problems related to intangible assets (Otlu and Çukacı, 2007, p. 115-116).

Monetary values of some intellectual capital elements owned by businesses are presented as intangible assets in financial statements when certain conditions are met. When the literature is examined, it is seen that in some sources, intellectual capital and intangible assets are used in the same sense. However, these two concepts are different from each other. While intellectual capital is expressed as information that turns into value, intangible assets are a concept that has found a place in accounting in current practices and should not be mixed with intellectual capital in this sense (Deran and Savaş, 2013, p. 75).

As it can be understood from the discussions, there is no clear consensus on the presentation and reporting of the intellectual capital components, including the goodwill because of the measurement and valuation difficulties due to the intangible concepts in the financial statements. The provisions in the Accounting Standards regarding the subject are given below.

4. GOODWILL IN THE ACCOUNTING STANDARDS

In the explanations regarding the chart of accounts in the Uniform Accounting System (UAS); “The goodwill is specified as the account used to monitor the positive differences between the cost incurred when acquiring a business and the value of the net assets (equity) of the business in question calculated at fair value, all the paid goodwill amounts are debited to the Goodwill account. It is eliminated by depreciation in equal installments within 5 years. Goodwill reported under Intangible Assets in TAS is not included as an asset in the Statement of Financial Position to be prepared under TAS/IFRS, as it does not meet the capitalization conditions.

According to paragraph 10 of TAS 38 Intangible Assets Standard, for an intangible asset (MODV (ITA) to be recognized separately from other assets by determinability, control and existence of future economic benefits. Moreover, it is stated that internally generated goodwill cannot be accounted for as an asset (parag. 48).

In this context; Goodwill cannot be recorded as a MODV(ITA) in terms of being inseparable from the business and other assets, generating an income by selling it alone or providing cost savings by using it in production, not creating an economic benefit, and claiming the existence of legal rights to prevent its use by others.

In paragraph 81 of TAS 36, which regulates the issues related to impairment in assets; “Goodwill acquired in a business combination is the payment made by the acquirer for expected future economic benefits from assets. By stating that Goodwill does not generate cash flows that are independent of other assets or groups of assets, and it often contributes to the cash flow of more than one cash-generating unit, it also cannot be individually identified and accounted separately.

Goodwill does not have a feature which can be distinguished from other assets and determined. However, goodwill arising from business combinations may be reported under a separate heading in the statement of financial position, other than intangible assets. According to TFRS 3 Business Combinations standards, the cost of an intangible asset acquired in a business combination is its fair value at the acquisition date. Within the scope of this standard, goodwill that occurs during a business combination and is recognized as an asset is not subject to depreciation. Goodwill created internally, on the other hand, cannot be capitalized in accordance with TAS 38 Standard.

Even if the fair value of the brand value created within the business is determined, it is not possible to account for the brand value in the statement of financial position, except for business combinations or acquisitions. It is also emphasized that if the brands created within the business cannot be capitalized, the information is not fully and clearly reflected to the users of the financial statements outside the business, and the companies that do not choose the way of merger will have less opportunity to compete with the companies that can capitalize their brand value through mergers or acquisitions (Bengü, 2009, p. 74).

4.1. Calculation of Goodwill

The buyer business measures the identifiable assets acquired and the identifiable liabilities assumed at their fair values at the acquisition date. Goodwill is the portion of the consideration paid in excess of the value of the net assets of the acquiree, measured at fair value, in the case of 100 percent ownership of the business acquired through the merger (acquired). If the consideration paid for the acquiree is less than the net value of the identifiable assets of the acquiree, negative goodwill occurs. For the business that acquires negative goodwill, it is recorded as profit in the income statement accounts. In terms of accounting for negative goodwill, both TDHP and TFRS 3 adopt the same principle. For the transferor business, negative goodwill is reflected in profit and loss in the period in which it arises (Özerhan, 2016, p. 326).

Example 1: Enterprise A took over the entire enterprise B by paying 250,000 TL. The value of the assets measured at fair value of entity B is TL 275,000, and the fair value of the liabilities is 65,000 TL. According to this data, the net assets of Company B are 210.000. Calculated as TL. In this case, there are no non-controlling shareholders over the acquired business. The goodwill amount is 40,000. TL.

RELATED ASSET ACCOUNTS TRANSFERRED	275,000
(with Fair Values)	
GOODWILL	40,000.
ACCOUNTS RELATING TO TAKING OFF PAYABLES	
(with Fair Values)	65,000.
BANKS (Amount Paid)	250,000.

Negative Goodwill:

Example 2: If entity A had purchased the whole of entity B in example 1 for TL 195 000, the portion of the purchase price below the net asset amount (TL 195,000 - TL 210 000 = - TL 15 000) (negative goodwill) will be recorded as profit on the purchase.

RELATED ASSET ACCOUNTS TRANSFERRED	275,000
(with Fair Values)	
ACCOUNTS RELATED TO TAKING OFF PAYABLES	65,000.-
(with Fair Values)	
BANKS (Amount Paid)	195,000.-
OTHER ORDINARY INCOME AND PROFITS	15,000.-

In the 19th article of the standard on business combinations, two methods are included in the measurement of assets acquired, liabilities assumed and non-controlling interests. Non-controlling interests of the acquirer;

First Method: In proportion to the share of the acquiree on its net assets,

Second Method: Will be able to measure over the fair value of the shares of the acquired business.

Let's try to explain this situation with the help of the following example.

Example: Business A has paid 230 000 000 TL in order to own 75% of business B. The fair value of entity B is TL 250 000 000. As of the purchase date, the fair value of the identifiable assets of entity B is TL 300 000 000, and the fair value of its liabilities has been determined TL 80 000 000. According to this data and the two methods mentioned above, the calculation of goodwill will be as follows.

First Method: In the Acquisition Party's Share of Net Assets:

Purchase Price:	230 000 000. TL.
Non-Controlling Interests of Entity B Net Identifiable	
Share on Assets:	(220 000 000 *25%): 55 000 000.
TL.	
Total:	285 000 000. TL.
Net Value of Identified Assets of Entity B:	(220 000 000). TL.
Goodwill Amount:	65 000 000. TL.

Second Method: Based on the fair value of the shares of the acquired business

Purchase Price	: 230 000 000. TL.
Fair value of entity B Non-Controlling	
Shares (250 000 000 * 25%)	: 62 500 000. TL.
Total	: 292 500 000. TL.
Net Amount of Defined Assets of entity B	: (220 000 000) TL.
Goodwill	: 72 500 000. TL

As can be seen from the received results, the amount of goodwill may differ according to the methods. This is because the fair value of 75% of the acquired business and the fair value of the 25% portion, representing minority interests, may differ. One of the main reasons for this difference may be that the controlling shareholders holding the majority shares of the acquired business have the opportunity to negotiate harder.

How much of the calculated goodwill belongs to the acquiring entity A and how much belongs to minority interests will be decomposed as follows.

Goodwill Amount of business A:

Fair value of the share of entity A (acquisition price)	:230 000 000. TL
Amount of identifiable assets of entity A	: (165 000 000).TL.
Difference: Goodwill Amount of the Parent Company	: 65 000 000. TL.

Goodwill Amount of Non-Controlling Shares (72 500 000 TL – 65 000 000 TL) will be 7 500 000. TL.

4.2. Goodwill Impairment

The financial crisis, which started in the United States of America in 2008 and spread all over the world, and the financial crisis, which did not reflect the real economic situation of companies (but arranged in accordance with financial reporting standards), and in which independently audited financial statements were the leading actor, increased the disputes on the necessity of flexibility in accounting practices. Due to the recent depression in the global economy, the depreciation of goodwill recorded in the financial statements of companies has increased. Parallel with this increase, goodwill impairment tests are of interest due to the difficulties and subtleties associated with the implementation of TAS 36 - Impairment of Assets Standard, which is a complex standard that requires practitioners to make a great deal of judgment in determining cash-generating units, estimating cash flows, and determining the appropriate discount rate, has become the focus of attention (Ertan and Gençoğlu, 2013, p. 8).

There is strong criticism in the literature about impairment test being left to the discretion of the management. According to Watts, one of the critics, the fact that impairment test is not verifiable and highly subjective, and that the allocation of goodwill to cash-generating units is optional, makes the impairment implementation open to manipulation. In such a case, there may be reservations, changes or delays in the declaration of impairment (Watts, 2003, p. 218).

While goodwill and intangible assets with an indefinite best before should be subject to an impairment test every year in accordance with TAS 36 standard, this issue can be overlooked and it can be evaluated whether there is an indication of impairment for the items in question. Due to the fact that goodwill is not subject to amortization, it is difficult to determine the necessary changes in valuation because of the need of carrying out valuation studies every year and the changes that have taken place in the company over time. For example, since the activities of the business line purchased by the company are partially integrated with the company's own activities over time, the cash flows cannot be determined separately and in this case; the impairment in the related good cannot be determined because of the difficulties in determining the correct value of the purchased business line. In addition, not making the distribution of goodwill among the relevant cash-generating units during the calculation of goodwill or not determining the distribution key correctly can also cause difficulties (Dursun and Kurt, 2008, p. 107-109).

If assets' recoverable amount is less than their book value, there is impairment in question. When assets are impaired, an entity has more than net selling price and value so their recoverable asset value should be calculated (Nobes and Parker, 2004, p. 132).

If the goodwill arising on the first acquisition date is distributed among more than one cash-generating unit within the enterprise, the amount of goodwill attributed to the unit is reduced by considering the decrease in the value of each relevant cash-generating unit in the following periods. Impairment that cannot be covered by goodwill is reduced by taking into account the registered values of the assets that make up the cash generating unit. These explanations can be made more understandable with the following example.

Example: Entity B acquired by entity A is defined as a single cash-generating unit and has acquired net assets of TL 5,000,000 bought for TL 5,500,000. Therefore, goodwill of TL 500,000 has emerged at the date of purchase. The detailed information about the assets of the B cash generating unit (business) is as follows.

Buildings	2 500 000
Facilities Machinery and Equipment	2 000 000
Inventory Stock	500 000
Goodwill	<u>500 000</u>
Total	5 500 000

During the valuation process carried out in relation to the cash generating unit B in the next accounting period, it has been observed that the fair value of the assets in this unit is 4,750,000 TL, therefore the value of the assets of this unit has decreased by 750,000 TL.

The decrease of 750 000 TL in the value of the assets of the cash-generating unit B will be covered primarily from the goodwill of the unit, and the impairment exceeding the goodwill amount will be distributed in proportion to the value of the unit assets. The calculation and accounting record regarding this will be as follows.

<u>Assets</u>	<u>Registered Value</u>	<u>Impairment</u>	<u>Net</u>
<u>Value</u>			
Buildings	2 500 000	(125 000)*	2 375 000
Plant Machi. and Equi.	2 000 000	(100 000)**	1 900 000
Fixtures	500 000	(25 000)***	475 000
Goodwill	500 000	(500 000)	0

$$*(250\,000/5\,000\,000) \times 2\,500\,000 = 125\,000$$

$$**(250\,000/5\,000\,000) \times 2\,000\,000 = 100\,000$$

$$**(250\,000/5\,000\,000) \times 500\,000 = 25\,000$$

OTHER ORDINARY EXPENSES AND LOSSES	750 000
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Goodwill Impairment Loss

GOODWILL	500 000
BUILDINGS	125 000
FACILITIES MACHINE AND EQUIPMENTS	100 000
INVENTORY STOCK	25 000

If there is a non-controlling interest in the acquired business as a result of the impairment test, the impairment resulting from the impairment test should be distributed between the parent

and minority interests. In the allocation of the impairment, the ratio used in the distribution of the goodwill is taken as basis.

5. GOODWILL REPORTING IN COMPANIES WHOSE STOCKS ARE TRADED ON THE ISTANBUL STOCK EXCHANGE

The data on the Goodwill arising from the acquisitions of companies whose stocks are traded in the Istanbul Stock Exchange are explained in Table 1. The data in the table has been investigated for businesses that have reported goodwill adjustments in their balance sheets and goodwill adjustments in their cash flow statements in the last three years (2018-2020).

Table 1. BIST Companies Reporting Goodwill in the Statement of Financial Position (2018-2020, TL)

NO	COMPANIES	31.12.2018	31.12.2019	31.12.2020
1	ANADOLU EFES BREWERY AND MALT IND.	2.612.996.000	3.221.352.000	3.299.250.000
2	AG ANADOLU GROUP HOLDING INC	2.607.085.000	6.934.409.000	7.012.308.000
3	AKÇANSA CEMENT INDUSTRY AND TRADE INC.	130.080.869	130.080.869	130.080.869
4	AKSA ACRYLIC and CHEMISTRY IND. INC.	5.989.000	5.989.000	5.989.000
5	AKIŞ REAL ESTATE INVESTMENT TRUST INC.	707.175	707.175	707.175
6	MEDITERRANEAN SEC. SER. INC. (AKDENİZ INV. HOLDING INC.	7.003.531	7.003.531	0
7	ALARKO HOLDING INC.	3.130.507	3.130.507	3.130.507
8	ALBARAKA TURK PARTICIPATION BANK INC.	4.000.000	3.970.000	4.783.000
9	ALARKO CARRIER INDUSTRY and TRADE INC.	0	3.130.507	3.130.507
10	ALTINYAĞ COMBINES INC.	0	1.099.398	436.473
11	ALTERNATİFBANK INC.	49.647.000	49.647.000	49.647.000
12	ANADOLU INCORPORATED TURKISH INSURANCE COMPANY	16.250.000	16.250.000	16.250.000
13	ARÇELİK INC.	507.966.000	808.786.000	989.060.000
14	ARTI INVESTMENT HOLDING INC.	1.525.025	1.011.431	
15	ANADOLU ISUZU AUROMOTIVE IND.TRADE INC.	2.340.995	2.340.995	2.340.995
16	ATLANTIS INVESTMENT HOLDING INC.	5.001.568	5.001.568	5.001.568
17	AYEN ENERGY INC.	17.461.935	17.461.935	17.461.935
18	BALATACILAR BREAK LINING IND. TRADE INC.	36.248	36.248	36.248
19	BASTAS BASKENT CEMENT IND. and TRADE INC.	11.452.041	0	0
20	BERA HOLDING INC.	5.185.704	5.185.704	0
21	BEYAZ FLEET CAR RENTAL INC..	800.000	800.000	0
22	COCA-COLA BEVERAGE INC.	819.446.000	843.828.000	983.477.000
23	CIMSA CEMENTINDUSTRY and TRADE INC.	151.824.511	148.119.252	148.119.252
24	CELEBİ AIR SERVICE INC.	43.925.159	60.932.266	73.295.661
25	CIMENTAŞ IZMIR CEMENT FACTORY	191.772.000	194.797.000	200.631.000

	TRADE INC.			
26	CARREFOURSA SABANCI TRADE CENTER INC.	482.479.139	482.479.139	482.479.139
27	DENGE INVESTMENT HOLDING INC.	0	0	43.524.354
28	DEVA HOLDING INC.	1.782.731	1.782.731	1.782.731
29	DOĞUŞ HOLDING INC	1.233.194.000	1.076.482.000	1.038.326.000
30	DOGAN COMPANIES GROUP HOLDING INC.	34.476.000	51.552.000	105.101.000
31	DOKTAŞ FOUNDRY TRADE and IND. INC.	6.128.935	7.540.809	10.213.643
32	DYO PAINT FACTORIES IND. And TRADE INC.	2.955.051	2.955.051	2.955.051
33	EGE ENDUSTRY and TRADE INC.	14.534.705	0	
34	EGE FERTILIZER INDUSTRY INC.	0	79.518.119	79.518.119
35	EREGLITEXTILE TOURISM IND. and TR. INC.	17.657.350	17.657.350	17.657.350
36	ESENBGA ELEKTRIC GENERATING INC.	0	79.243	79.243
37	ETILER FOOD and TRADE INV. IND. and TR INC.	0	1.099.398	436.473
38	FADE FOOD INVESTMENT IND. TRADE INC.	5.330.666	0	0
39	TURKEY GARANTI BANK INC.	6.388.000	6.388.000	6.388.000
40	GEDİZ PACKAGING INDUSTRY and TRADE INC.	2.100.000	2.100.000	2.100.000
41	GENTAŞ GENERAL METAL IND. TRADE INC.	942.792	942.792	942.792
42	GULER INVESTMENT HOLDING INC.	5.626.184	4.595.485	4.595.485
43	GLOBAL INVESTMENT HOLDING INC.	89.785.343	98.944.709	117.825.709
44	GOLTAŞ LAKE DISTRICT CEMENT IND.&TR. INC.	363.448	363.448	363.448
45	T.A.Ş FERTILIZER FACTORIES TR. & INC..	121.614.875	87.044.600	60.572.972
46	HEKTAS TICARET TRADE and INC.	10.321.922	10.321.922	69.369.257
47	IDEALIST CONSULTANCY INC.	2.282.706	2.282.706	2.282.706
48	IHLAS HOLDING INC.	6.975.245	938.274	0
49	IHLAS REAL ESTATE PROJECT DE. and TR. INC.	5.922.752	0	0
50	İNDEKS INFORMATION SYSTEMS ENGINEERING TR. & INC.	1.897.699	1.897.699	1.897.699
51	IPEK NATURAL ENERGY RESO. SEARCH and PRODUCTION INC.	15.773.000	15.773.000	11.232.000
52	TURKEY İS BANKASI INC..	35.974.000	35.974.000	35.974.000
53	İSBİR HOLDING INC.	3.507.775	3.507.775	11.096.270
54	İS INVESTMENT SECURITIES INC.	38.593.847	38.593.847	38.593.847
55	İZ LIVESTOCK FARMING and FOOD IND. TRADE INC.	1.215.163	1.215.163	1.215.163
56	KAREL ELECTRONIC and TRADE INC.	431.946	431.946	BİLGİ YOKTUR
57	KARSAN AUTOMOTIVE INDUSTRY and TRADE INC.	0	10.645.000	10.645.000
58	KOÇ HOLDING INC.	3.244.429.000	3.545.249.000	3.725.523.000
59	KAFEIN SOFTWARE SERVICES TRADE INC.	15.997.714	26.292.242	64.740.544
60	KLIMASAN AIR-CONDITION INDUSTRY and TRADE INC.	383.655	383.655	383.655
61	KORDSA TECNIC TEXTILE INC.	171.912.390	798.034.611	923.388.013
62	KOZA ANADOLU METAL MINING BUSINESS INC.	15.415.000	15.415.000	11.232.000

63	KOZA GOLD BUSINESSES INC.	14.017.000	14.017.000	11.232.000
64	KARDEMİR KARABUK IRON and STEEL IND. & TR. INC.	0	5.411.705	5.411.705
65	KRISTAL COKE and BEVERAGE IND. TR. INC.	5.045.257	5.045.257	5.045.257
66	KERVAN FOOD INDUSTRY and TRADE INC.	0	6.996.362	16.855.600
67	LOKMAN HEKİM ENGÜRUSAGMEDICAL SERVICES INC.	1.848.336	1.186.400	0
68	LOGO SOFTWARE INDUSTRY and TRADE INC.	136.752.195	146.362.128	202.740.417
69	MARKA INVESTMENT HOLDING INC.	37.271.488	19.392.247	0
70	MAVI CLOTHING INDUSTRY and TRADE INC.	136.878.000	154.398.000	188.945.000
71	MIGROS TRADE INC.	2.252.992.000	2.252.992.000	2.252.992.000
72	MLP HEALTH SERVICES INC.	40.217.000	40.217.000	38.661.000
73	NATUREL RENEWABLE ENERGY TR. INC.	79.243	79.243	79.243
74	NETAŞ TELECOMMUNICATIONS INC.	96.422.343	108.872.627	134.537.477
75	NUROL HOLDING INC.	73.537.000	73.537.000	73.537.000
76	NUH CEMENT INDUSTRY INC.	17.348.274	17.348.274	17.348.274
77	OYAK CEMENT FACTORIES INC.	7.062.941	7.062.941	7.062.941
78	OZAK REAL ESTATE INVESTMENT TRUST INC.	18.433.792	18.433.792	10.076.570
79	ROYAL CARPET TREAD TEXTILE FURNITURE IND. and TR. INC.	9.072.707	9.072.707	9.072.707
80	SAFKAR EGE REFRIGERATION IND. & TR. INC.	1.950.370	1.950.370	1.950.370
81	HACI OMER SABANCI HOLDING INC.	849.215.000	1.475.337.000	1.600.690.000
82	SARTEN PACKAGING INDUSTRY & TRADE INC.	312.754	312.754	312.754
83	SELCUK PHARMACY STORAGE TRADE and IND. INC.	31.194.401	31.194.401	31.194.401
84	TURKEY BOTTLE and GLASS FACTORIES INC.	274.084.000	301.469.000	368.483.000
85	SMARTIKS SOFTWARE INC.	0	10.294.528	10.294.528
86	SENKRON SECURITY and COMMUNICATION SYSTEMS INC.	0	1.546.338	1.546.338
87	SOK MARKETS TRADE INC.	578.942.596	579.092.596	579.092.596
88	TAV AIRPORTS HOLDING INC.	819.687.000	915.708.000	1.234.577.000
89	TURKCELL COMMUNICATION SERVICES INC.	32.834.000	32.834.000	40.010.000
90	TURKISH ECONMY BANK INC.	421.124.000	421.124.000	421.124.000
91	TURKISH AIRLINES INC.	65.000.000	74.000.000	91.000.000
92	TEKFEN HOLDING INC.	0	0	91.838.000
93	TEMAPOL POLYMER PLAS. & CONS. IND. TR. INC.	2.750.000	3.400.000	3.400.000
94	TURKEYINDUSTRY DEVELOPMENT BANK INC.	1.005.000	1.005.000	1.005.000
95	TURK TELECOMMUNICATION INC.	44.944.000	44.944.000	44.944.000
96	TURKEY FOUNDATION BANK	14.631.000	14.631.000	14.631.000
97	ULKER BISCUITS INDUSTRY INC.	331.975.000	388.047.000	496.196.000
98	VESTEL ELEKTRONICS INDUSTRY & TRADE INC.	197.793.000	197.793.000	196.568.000
99	VAKIF REAL ESTATE INVESTMENT CORPORATION INC.	14.631.400	14.631.400	14.631.400
100	YDA CONSTRUCTION INDUSTRY and TRADE INC.	29.500.000	29.500.000	29.500.000

101	YESİL REAL ESTATE INVESTMENT PARTNERSHIP INC.	61.058.003	0	0
102	YAPI VE KREDİ BANK INC.	979.493.000	979.493.000	979.493.000
103	YESİL CONSTRUCTION INDUSTRY INC.	35.865.873	21.443.788	21.443.788
	TOTAL	20.426.987.274	27.313.725.958	29.075.093.219

According to the findings obtained within the scope of the research; Goodwill data was found in the balance sheets of 91 companies whose stocks are traded on the Istanbul Stock Exchange in 2018. This number increased to 96 in 2019 and 93 in 2020. There were two new companies reporting goodwill for the first time in their 2019 balance sheet. Despite this, it has been found out that the reason for the “5” decrease in the number of companies reporting goodwill in 2020 compared to the previous year is due to the deduction of the goodwill reported in the previous year from the records in 2020.

The reported goodwill amounts by years were 20,426,987,274 TL in 2018, 27,313,725,958 TL in 2019 and 29,075,093,219 TL in 2020, respectively. The increase in the goodwill amount (approximately 34%) arising from the mergers in 2019 is remarkable. This result shows that company acquisitions increased in 2019 and the market value of the acquired companies increased. The increase in 2020 was quite limited. According to this result, it can be said that the Covit 19 pandemic, which was experienced on a global scale in 2020 and affected all areas of social and economic life, also had a negative effect.

Table 2. BIST Companies Reporting the Highest Amount of Goodwill (2018-2020)

NO	COMPANIES	31.12.2018	31.12.2019	31.12.2020
1	ANADOLU EFES BREWERY AND MALT IND.	2.612.996.000	3.221.352.000	3.299.250.000
2	AG ANADOLU GROUP HOLDING INC.	2.607.085.000	6.934.409.000	7.012.308.000
3	DOGUSHOLDING INC.	1.233.194.000	1.076.482.000	1.038.326.000
4	KOÇ HOLDING INC.	3.244.429.000	3.545.249.000	3.725.523.000
5	MIGROS TRADE INC.	2.252.992.000	2.252.992.000	2.252.992.000
6	HACI OMER SABANCI HOLDING INC.	0	1.475.337.000	1.600.690.000
7	TAV AIRPORTS HOLDING INC.	0	0	1.234.577.000
	TOTAL	11.950.696.000	18.505.821.000	20.163.666.000

Companies reporting goodwill over TL 1 000 000 000 (One billion TL) in their balance sheet are given in Table 2. It is seen that the companies in this table are Turkey's largest holdings. According to the table data, approximately 12 000 000 000 TL of the goodwill amount reported in 2018 belongs to 5 companies. In 2019, 6 companies reported 18 500 000 000 TL and 67% of the total goodwill amount. In 2020, it is seen that the amount reported by 7 companies is approximately 20 160 000 000 TL and 70%. These results show that a very large part of goodwill is reported by very few companies, and in a sense, the distribution among companies is in different dimensions.

One of the points that was especially highlighted in this research was the companies that reported a decrease in the amount of goodwill. It has been tried to determine the reason why these enterprises made a reduction in the amount of goodwill compared to the previous period. At this stage, it is useful to note the following. In this study, companies that report a decrease in the amount of goodwill in their year-end financial statements compared to the previous year are emphasized. Due to time constraints, the balance sheet footnotes of each company for 3 years could not be examined. On the other hand, if the acquisition of a new company with high goodwill and a lower amount of goodwill reduction were made together during the year (for example, a decrease of 500 TL in the goodwill amount during the year when a new company with 1,000 TL goodwill was purchased), there will be no reduction so such reductions were not included in the evaluation.

The reasons for the decrease in the goodwill of the companies within the scope of the research in 2019 and 2020 have been presented in Table 3. According to the data, at the end of 2019, a decrease in the goodwill amount of 16 enterprises was detected compared to 2018. As a result of the analysis of the balance sheet footnotes of the related companies, 2 of 16 companies did not make any explanation regarding the reason for this decrease. 4 companies announced the transfer of goodwill, 1 company announced that the goodwill amount reported in the previous year was adjusted, and 9 companies announced that there was a decrease in the goodwill amount as a result of the impairment test carried out in 2019.

Table 3. Reasons for Reporting Impairment of Goodwill in BIST Companies (2019-2020)

NO	COMPANIES	2019	2020
1	ANADOLU EFES BREWERY and MALT IND. INC.	*	
2	AG ANADOLU GROUP HOLDING INC.	IMPAIRMENT TEST	*
3	AKDENIZSEC. SERV. INC. (AKDENIX INVESTMENT HOLDING INC)	*	NO INFORMATON
4	ALBARAKA TURKPARTICIPATION BANK INC.	NO INFORMATON	
5	ALTINYAG COMBINES INC.	*	NO INFORMATON
6	ARTI INVESTMENT HOLDING INC.	NO INFORMATON	NO INFORMATON
7	BASTAS BASKENT CEMENT IND. & TR. INC.	COMPANY TRANSFER	
8	BERA HOLDING INC.	*	COMPANY TRANSFER
9	BEYAZ FLEET AUTO RENTAL INC.	*	NO INFORMATON
10	CIMSA CEMENT IND. & TR. INC.	IMPAIRMENT TEST	*
11	DOGUS HOLDING INC.	COMPANY TRANSFER	COMPANY TRANSFER

12	EGE INDUSTRY and TRADE INC.	ADJUSTMENT	
13	ETILER FOOD and INVESTMENT IND. & TR. INC.	*	NO INFORMATON
14	FADE FOOD and INVESTMENT IND. & TR. INC.	IMPAIRMENT TEST	*
15	GÜLER INVESTMENT HOLDING INC.	COMPANY TRANSFER	*
16	GÜBRE FABRİKALARI T.A.Ş.	IMPAIRMENT TEST	IMPAIRMENT TEST
17	İHLAS HOLDİNG A.Ş.	IMPAIRMENT TEST	IMPAIRMENT TEST
18	İHLAS GAYR.PROJE GEL. VE TİC A.Ş.	IMPAIRMENT TEST	*
19	İPEK DOĞAL ENERJİ KAYN ARŞ. VE ÜR A.Ş.	*	NO INFORMATON
20	KOZA ANADOLU METAL MAD. İŞL.A.Ş.	*	IMPAIRMENT TEST
21	KOZA ALTIN İŞLETMELERİ A.Ş.	*	IMPAIRMENT TEST
22	LOKMAN HEKİM ENGÜRÜSAĞ SAĞ.HİZ. A.Ş.	COMPANY TRANSFER	*
23	MARKA YATIRIM HOLDİNG A.Ş.	IMPAIRMENT TEST	ADJUSTMENT
24	MLP SAĞLIK HİZMETLERİ A.Ş.	*	COMPANY TRANSFER
25	ÖZAK GAYRİMENKUL YAT. ORTAKLIĞI A.Ş.	*	ADDING TO THE COST
26	VESTEL ELEKTRONİK SAN VE TİC A.Ş.	*	NO INFORMATON
27	YEŞİL GAYRİMENKUL YATIRIM ORT. A.Ş.	IMPAIRMENT TEST	*
28	YEŞİL YAPI ENDÜSTRİSİ A.Ş.	IMPAIRMENT TEST	*

(*) No impairment has been reported in the related companies during these years.

The same number of companies in 2019 as in 2020, which is 16 companies, made a reduction transaction in the amount of goodwill compared to the end of the previous period. According to the data (seen in table 3) prepared by means of the analysis of the balance sheet footnotes of these companies that reported a decrease in the amount of goodwill, the following were determined as the reasons for this fall. No explanation was found in the footnotes regarding 7 companies. 4 companies reported that they made a reduction in the amount of goodwill based on the impairment test conducted during the year. 1 company has declared that this year's goodwill amount has decreased because they made an adjustment to the erroneously calculated goodwill amount in the previous year. 3 companies reported that they canceled the goodwill because they took over the companies that were purchased in the previous years. One company has given a statement that the goodwill amount resulting from the merger was transferred to the costs of the residences and offices delivered when the project was at the completion stage. It was significant that no information was found in the footnotes of the

balance sheet regarding the reduction in the goodwill amount reported by 7 companies in 2020.

Thanks to the detailed analysis of the balance sheet footnotes of the companies reported goodwill impairment, it has been seen that the reasons for the impairment are quite different from each other. Statements in only a few of the causes for impairment (without giving some information about the companies in order to keep the data confidential) are shared below.

- ✓ ... TL, which is the difference between the market value and the equity value at the date of purchase has lost its validity as it does not exist as of 31.12.2020. For this reason, a provision for impairment has been set aside for this amount.
- ✓ As of September 4, 2019, 100% of the shares of ... Food Industry and Trade Limited Company was acquired for ... TL. Goodwill that amounts to TL 1.099.398 has been accounted for in the consolidated financial statements as a result of the related acquisition. As of 31 December 2020, goodwill amount has been accounted as TL 436.473 in the financial statements.
- ✓ The goodwill amount generated as a result of the business combination has been transferred to the costs of the houses and offices delivered when the project was at the completion stage.
- ✓ ... Yapı Enstüstri A.Ş.'nin ... tarihli Şirket Değeri Tespit Raporu ... tarih, DEG 2020-14 sayı numarası olmak üzere ... Bağımsız Denetim ve YMM A.Ş. tarafından hazırlanmıştır. Construction Industry INC's Company Valuation Report dated ... with the date, DEG 2020-14 issue number ... was prepared by Independent Auditing and YMM A.Ş.
- ✓ The amount of ... TL reported as Goodwill in the financial statements of the company for the accounting period ending on 31 December 2019 has been adjusted retrospectively since it does not meet the definition of Goodwill specified in TAS 38.

As mentioned above, goodwill and intangible assets with an indefinite useful life must be tested for impairment every year in accordance with TAS 36 standard. Due to the necessity of valuation studies implementation every year and the changes in the company over time, it is difficult to determine the necessary changes in valuation. This makes it difficult to detect the impairment in goodwill over time. In this study, the reason for the decrease of goodwill in

2020 could not be determined to a great extent. It is necessary to investigate further whether the COVID-19 pandemic, which took place globally in 2020, has an effect on this result.

6. IMPLICATIONS AND RECOMMENDATIONS

Many national and international companies choose to buy companies within and outside the country for some strategic purposes such as improving market dominance and competitive conditions, and entering new markets more quickly and easily. Attempting to acquire companies that have succeeded in being distinguished with unique values (human, brand, technology, etc.) that are different and superior to their similars in the sector in which they operate, may result in paying a higher price than the net assets of these companies.

Calculation of the goodwill, which is defined as the difference between the price paid for the purchased company and the amount of its net assets, recording, monitoring and reporting the value changes in the goodwill in the following years is fundamental in terms of accounting. These issues are regulated with different provisions in TMS, BOBI FRS and KÜMİ FRS, which are currently being implemented.

According to TAS provisions, an impairment test for the cash-generating unit for which goodwill is calculated must be performed in order to make a value adjustment for goodwill. Especially, subjective behavior will result in erroneous reporting in financial data in these valuations. While performing the impairment test every year brings additional costs to the companies, the fact that the test is left to the discretion negatively affects the differentiation of financial data among companies and the comparison of data. In BOBI FRS and KÜMİ FRS, the amortization of goodwill without being subjected to an impairment test brings some conveniences in practice.

In this study, the reports on goodwill prepared between 2018-2020 in companies whose stocks are traded on the Istanbul Stock Exchange in Turkey have been emphasized. According to the findings of the study, it has been detected that a small number of companies have corrected their goodwill data according to the results of the impairment test. However, it has also been found out that most of the companies report by making a discount in the data related to goodwill without performing any impairment test. It can be said that there is no standard practice in this regard in our country, and the relevant and competent authorities do not focus on this issue. The reliability of the results obtained without performing an impairment test is a matter of dispute. Accounting practices should be explained in the footnotes of the financial statements in order for the financial statements to reveal the real situation and activity results

of the businesses in a clearer and more understandable way. Otherwise, it will occur as a result of the decision makers' misbehavior in their business decisions and making wrong decisions.

The fact that the transfer of the brand value of especially technology companies created within the company and which is seen as goodwill when the company is sold, is prohibited by accounting standards causes significant differences between the reported values of these companies and their market values. Due to the inability to develop objective measurement and valuation methods, such practices will cause the financial statements to lose their meaning and importance and diminish the trust in these table data.

In order to eliminate the problems that may be caused by these differences, it is necessary to make legislative changes in the relevant Accounting Standards that will be simpler, easier and less costly to understand and implement. Until the legislative changes are made, it is beneficial for the relevant institutions and organizations and independent audit firms to make more sensitive evaluations and examinations on the subject.

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