Otheos Electric Company: Impairment of Goodwill on Equity

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Abstract

The purpose of this instructional case study is to illustrate a financial reporting issue from real world that may arise while preparing financial statements under IFRS. The case study involves the disagreement on the methods and assumptions between the independent auditors and the management of the company about the subsequent measurement of goodwill on equity that has arisen on acquisition of the interest in an investee company that has been listed in the Istanbul Stock Exchange by the investor company which is in the process of going public. The case can be used in the International Financial Reporting courses of the graduate or undergraduate level accounting or business programs and enriches student understanding of the process of goodwill impairment testing.

Key Words: Accounting Case Study, IFRS, Goodwill, Turkey,

1. Introduction

On acquisition of the investment in an associate, any difference (if positive) between the cost of acquisition and the investor's share of the fair values of the net identifiable assets of the associate is accounted as goodwill on equity. Measuring goodwill on equity after the initial recognition could be troublesome. The purpose of this case study is to introduce a debated area in the application of IFRS, impairment of goodwill on equity, to students. The case is based on the financial statement preparation process of a real company. The names of the entities used herein in are fictional to protect proprietary interests and privacy. “OTHEOS” and “TALIA” are the fictional names that represent the companies. The case study involves disagreement on the methods and assumptions between the independent auditors and the management of the company about the subsequent measurement of goodwill on equity that has arisen on acquisition of the interest in an investee company (TALIA) that has been listed in the Istanbul Stock Exchange by the investor company (OTHEOS) which is in the process of going public. This instructional case can be used in the International Financial Reporting courses of the graduate or undergraduate level accounting or business programs as a supplement to textbook materials. The case is useful because it enriches student understanding of accounting for investments in associates, accounting for goodwill on equity, and impairment testing. Overall, it helps students to develop some of the necessary skills in applying IFRSs in a real-world setting. Students are required to organize the given information, identify the problem, review International Accounting Standard No. 28, *Investments in Associates*, interpret the relevant paragraphs, exercise judgment, make necessary calculations, and suggest how the company should make the impairment test for goodwill on equity.

The rest of the paper is organized into five sections. The second section provides a review of case study literature related to IFRS implementations. The third section presents the case and provides some background about the companies. The fourth section discusses the disagreement between the independent auditors and the management of the company about the subsequent measurement of goodwill on equity. The fifth section provides a teaching note and gives information about student feedback while final section presents a sample solution.

2. Literature Review

A substantial number of countries have recently adopted IFRS as their mandated accounting rules for publicly traded companies. However, the case study literature related to specific implementations of IFRSs is not large enough (Geary and Street, 2007; Carlin, 2009; Riedl, 2008; Riedl and Meyer, 2009). A substantial amount of case studies focus on convergence between US GAAP and IFRS and are likely the ones with the greatest availability to instructors in the US (Henry, Ling, and Yang, 2007; Henry and Yang, 2007; Haverty, 2007; Brigitte, Beckman, and Eisenrieder, 2007; James, 2009). By focusing impairment of goodwill on equity in IFRS setting I believe that this instructional resource fills the part of the gap.

3. Case Background

After getting a bachelors' degree on electrical engineering in 1985, Mr. Omer established OTHEOS Electric Company which provides infrastructure solutions such as electric systems, defense electronics, renewable energy supply systems, mobile, and wireless systems. The headquarters of the business is located in Istanbul, Turkey. Turkey is described as an emerging market economy and the country is mainly producing agricultural products, textiles, motor vehicles, construction materials, consumer electronics, and home appliances. Though the Turkish economy suffered from very serious economic problems such as high inflation rates and high public borrowing in the past, it is now on the verge of attaining economic stability, sustainable growth, and dis-inflation.

Mr. Omer has run the company successfully over many years. In 2003, he anticipated that the telecommunication industry would have a brilliant future in Turkey and he founded TALIA Telecom Company to operate in the business of producing, operating, and maintenance of telecommunication systems. After having a high pace of growth following its inception, TALIA Telecom Company went public in 2006.

In 2007, the board of OTHEOS Electric Company decided to buy the 20% shares of TALIA Telecom Company and they came to an agreement of a purchase price of 26,554,000 TL cash for the 20 % of the shares. This price was very close to the market value of TALIA Telecom Company that was obtained from the Istanbul Stock Exchange. The purchase was completed in June 30th, 2007. The accounting department of the OTHEOS Electric Company agreed on to use equity method. Equity method is required in International Accounting Standard No. 28, *Investments in Associates*, which prescribes the investor's accounting for investments in associates. Under the equity method, the investment is initially recorded at cost. It is subsequently adjusted by the investor's share of the investee's post acquisition change in net assets. The respective balance sheet items immediately before and immediately after the share purchase and calculations for goodwill on equity are shown in Exhibit-1 and Exhibit-2.

Exhibit 1- OTHEOS Electric and TALIA Telecom Balance Sheets before the Sale of Shares and Balance Sheet of OTHEOS Electric After the Sale of Shares (in Turkish Liras)

	OTHEOS Electric, June 30th ,2007	**TALIA Telecom, June 30th ,2007**	**OTHEOS Electric, June 30th ,2007 (After Share Sale)**
Current Assets	TL 30,000,000	TL 50,000,000	TL 3,446,000
Fixed Assets	15,000,000	20,852,850	27,170,570
Goodwill	0	0	14,384,430
TOTAL	**TL 45,000,000**	**TL 70,852,850**	**TL 45,000,000**

Since the fair value of the total net assets of the TALIA Telecom Company at the date of purchase was 60,852,850 TL[1] and the purchase price for the 20 % of the shares was 26,554,000 TL, goodwill on equity of 14,383,430 TL was calculated and recorded on OTHEOS Electric Company's balance sheet.

[1] Fair market value of net assets is assumed to the same as the book value.

Exhibit 2- Calculation of Goodwill on Equity that Arise When OTHEOS Electric Acquire an Interest in TALIA Telecom (in Turkish Liras)

	TALIA Telecom Net Assets June 30th ,2007	
Current Assets	TL 50,000,000	
Fixed Assets	20,852,850	
Less: Liabilities	(10,000,000)	
NET ASSETS	**TL 60,852,850**	
Selling Price		26,554,000
The Interest of OTHEOS Electric in TALIA Telecom (20%)		(12,170,570)
Goodwill on Equity		**14,383,430**

In reference to the International Financial Reporting Standard No. 3, *Business Combinations*, the management of the company did not amortize the goodwill on equity that was recognized as an asset at the purchase date and decided to test the carrying amount of goodwill on equity when there is an indication the unit may be impaired. Subsequent to sharing the sales, both companies continued to grow and increase their profitability. After accomplishing many prestigious projects worldwide, the OTHEOS Electric decided to go public in the first quarter of 2010 in a 2009 board meeting. TALIA Telecom had reported 8,000,000 TL and 10,280,000 TL net incomes for the years 2007 and 2008, respectively. There were 7,000,000 TL and 10,000,000 TL increases in the net cash and cash equivalents for the years 2007 and 2008, correspondingly as well.

TALIA Telecom distributed all the reported income as cash dividend in the beginning of following years. Since the government was going to sell 3rd Generation Mobile Communication System Licenses, the cash flow and profit expectations of managers related to future years became more optimistic.

The management of the TALIA Telecom projected that the net cash flows of the company would annually grow at 8% in the next five years, 5% between the years 2014-2040 and 3% between the years 2041-2060. Despite of this positive picture, the shares of the TALIA Telecom that are listed in Istanbul Stock Exchange suffered a big depreciation because of the global financial crisis, started in 2008, and continued in 2009. At the end of 2009, the market value of the company decreased by %40 to 80.000.000 TL which was 132.770.000 TL at the date of share purchase in 2007.

4. Case

After graduating from university with a business degree in June 2009, Mr. Orhan started to work as a junior auditor in an independent audit firm. The first task of Mr. Orhan was to audit the financial statements of OTHEOS Electric for the year ended in December 31, 2009 under the supervision of senior auditor Mr. Veli. When the audit was near completion, Mr. Orhan was very glad about his performance in his first audit. Especially, he was very happy because he was invited to the last meeting with Mrs. Bahar, controller of the OTHEOS Electric, before the release of financial statements.

There was a feel-good factor at the beginning of the meeting. Mrs. Bahar agreed to make all the accounting adjustments immediately proposed by Mr. Veli and Mr. Orhan. However, Mr. Veli, senior auditor, brought out the issue of goodwill on equity that arose at acquisition of the investment in TALIA Telecom. He insisted to work out the issue of goodwill on equity that is reported in the face of the balance sheet. Mrs. Bahar took the words from Mr. Veli's mouth and noted that she was curious about what to discuss in this issue and she added that there was no longer need to amortize the goodwill according to IFRS 3, *Business Combinations.*

Mr. Veli, senior auditor, replied by saying that the market value of the shares of TALIA Telecom decreased substantially in 2009 and therefore, an impairment loss should be reported for the goodwill on equity. When his words draw to close, Mr. Veli gave the working sheet showing the impairment loss calculations he made (shown in Exhibit-3 below) to the controller of the company.

Exhibit 3- Calculation of Goodwill Impairment by the Auditor

	June 30th, 2007	
Market Value (TALIA Telecom)	132,770,000	
Purchase Price (Affiliate %20)	26,554,000	
%20 of the Net Assets of TALIA Telecom	(12,170,570)	
Goodwill on Equity	14,383,430	14,383,430
	December 31th , 2009	
Market Value (TALIA Telecom)	80,000,000	
Share of OTHEOS Electric (Affiliate %20)	16,000,000	
Investment in Investee Stock	12,170,570	
Adjusted Goodwill on Equity	3,.829,430	3,829,430
Goodwill Impairment		10,554,000

The calculations made on the worksheet did not please Mrs. Bahar, the controller of the company. She stated that they could not agree to write down a huge amount of goodwill impairment loss especially in the process of going public. She also stated that this would annoy the partners and top managers of the company.

After thinking a couple of minutes, Mrs. Bahar stated that the company they invested in has been distributing cash dividends consistently in ascending order, and it has been expected to increase furthermore in the future. She added that the value of a company could be found by discounting the future cash flows of a company by using a suitable discount rate. She argued that the credit cost of company was 12% and the value found by using this method would be much higher than the stock market value of the company. Moreover, she argued that Istanbul Stock Exchange is an emerging, not effective, and a speculative one and therefore a market value obtained from this stock exchange should not be used in a goodwill impairment test.

Mr. Orhan thought that there is some merit to both arguments. At the end of the meeting, there was no deal between parties, auditors and controller, on the issue of goodwill impairment and they decided to set up a new meeting in the following days to negotiate the issue. Mr. Veli apportioned a task to Mr. Orhan for this issue and requested a brief report that states the issue, and brings a resolution to the problem for the next meeting. In addition, Mr. Veli warned Mr. Orhan and asked him to be due diligent while preparing the report since OTHEOS Electric is one of the important customers of the audit firm. On the other hand, he requested him to prepare the report without compromising the independence principle.

Case Requirements

a. Do you agree with the goodwill impairment test calculations prepared by the senior auditor Mr. Veli?

b. Do you agree with the arguments set forth by the controller Mrs. Bahar? Do you think that her arguments are relevant?

c. What are the procedures the entity should apply in order to ensure that there is no impairment in goodwill? What is the result of these procedures?

NOTE: Refer to IAS 28, *Investments in Associates* while solving this case.

5. Teaching Note and Student Feedback

This instructional case can be used in the International Financial Reporting courses of the graduate or undergraduate level accounting or business programs as a supplement to textbook materials. I recommend that instructors allow at least 70 minutes of class time to students for completing the case requirements. For optimal class discussion, another 70 minutes of class time should be devoted to discussion of the findings. Instructors may provide simple examples to review the concept of equity method and goodwill at the beginning of the class session.

This case has been used in the International Financial Reporting course of the undergraduate level business program offered by the Istanbul University. The classroom evidence suggests that students perceive the case as a great learning experience. They found the case to be helpful in improving their understanding of the process of goodwill impairment testing. In addition, they state that this case study makes them learn better than other textbook materials used in the class.

6. Sample Solution

According to IAS 28, *Investments in Associates*, on acquisition of the investment any difference between the cost of the investment and the investor's share of the net fair value of the associate's identifiable assets and liabilities is accounted as goodwill on equity and this goodwill relating to an associate is included in the carrying amount of the investment (IAS 28, p23). Because goodwill that forms the carrying amount of an investment in an associate is not separately recognized, it is not tested for impairment separately by applying the requirements for impairment testing goodwill in IAS 36, *Impairment of Assets*. Instead, the entire carrying amount of the investment is tested for impairment in accordance with IAS 36 as a single asset, by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount, whenever application of the requirements in IAS 39, *Financial Instruments: Recognition and Measurement*, indicates that the investment may be impaired (IAS 28, p33).

IAS 36 requires that companies should base cash flow projections on the most recent financial budgets/forecasts approved by management. Detailed, explicit, and reliable financial budgets/forecasts of future cash flows for periods longer than five years are generally not available. For this reason, management's estimates of future cash flows are based on the most recent budgets/forecasts for a maximum of five years. Management may use cash flow projections based on financial budgets/forecasts over a period longer than five years if it is confident that these projections are reliable and it can demonstrate its ability, based on past experience, to forecast cash flows accurately over that longer period (IAS36, p35). In addition, it is expressed that competitors are likely to enter the market and restrict growth. Therefore, entities will have difficulty in exceeding the average historical growth rate over the long term (say, twenty years) for the products, industries, or country or countries in which the entity operates, or for the market in which the asset is used (IAS36, p.37).

In his test of goodwill impairment, Mr. Veli compared the book value (carrying amount) of the investment, including goodwill, with the market value of the investment that is obtained from the Istanbul Stock Exchange. On the other hand, Mrs. Bahar compared the book value (carrying amount) of the investment, including goodwill, with the present value of expected cash flows for 50 years. According to the explanations given in the beginning of this section and the assumptions given in the case, the recommended path that should be followed in impairment test for goodwill on equity is shown in Figure-1. The value in use in the table (24,490,430 TL) is the present value of projected net cash flows of 20 years, assuming a discount rate of 12%.

Thus, the recoverable amount of the TALIA Company can be determined to be 24,490,430 TL based on the value-in-use estimate. Because the carrying amount of the company exceeds the recoverable amount, OTHEOS Electric should report an impairment loss of 2,063,570 TL. Nonetheless, it should be noted that the value in use and therefore the amount of goodwill reported on the balance sheet would be different in a model with different discount and growth rates. Consequently, it would be accurate to make sensitivity analysis in calculations related to value in use. A sensitivity analysis can be conducted by varying the growth assumptions. Exhibit 4 shows the value in use and impairment loss amounts for each scenario at 12% discount rate. The outcomes of the sensitivity analysis show the importance of accurate growth assumptions.

Figure 1- Goodwill Impairment Test

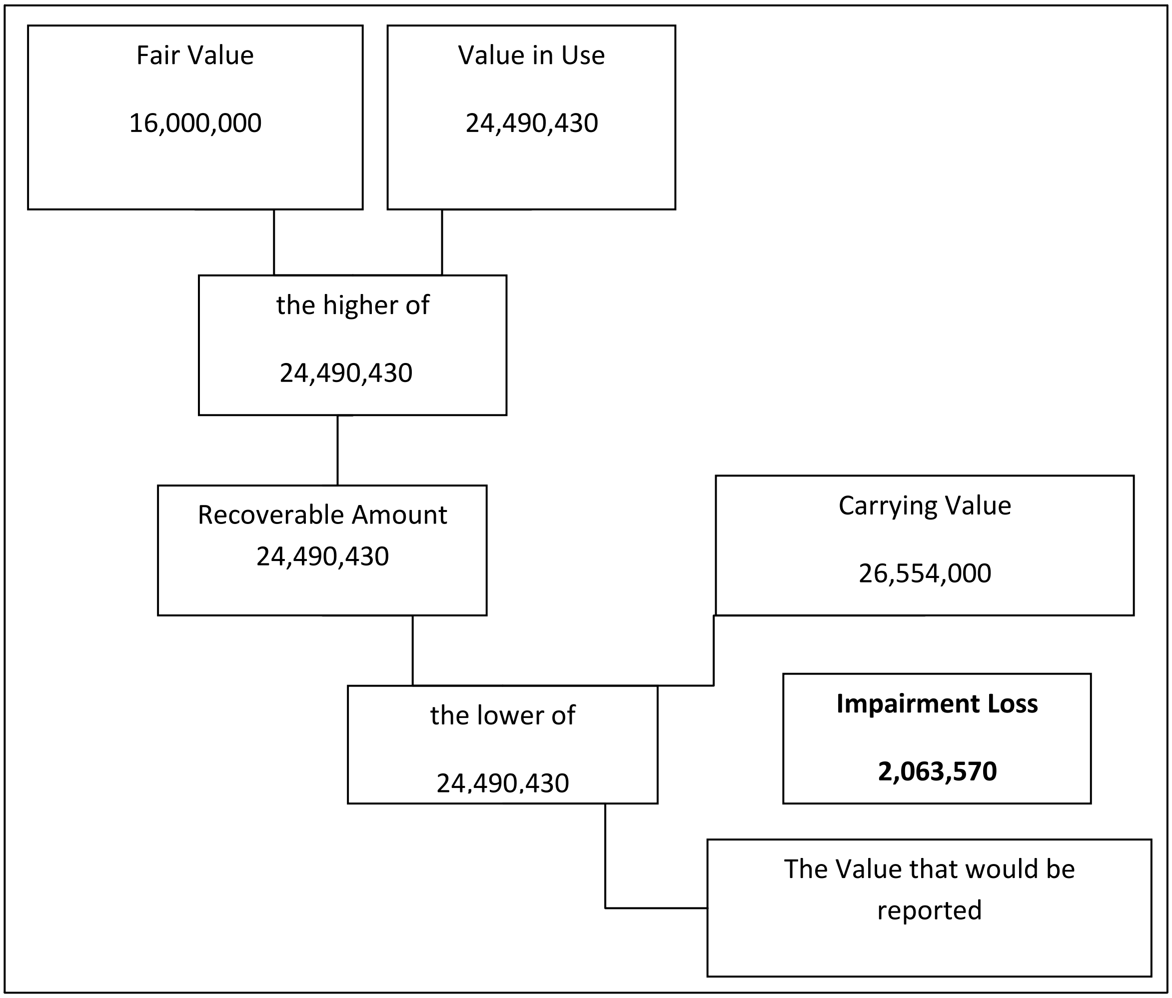

Exhibit 4- Sensitivity Analysis for Impairment Loss

	Best	Average	Worst
Growth rate assumed (2009-2013)	10%	8%	6%
Growth rate assumed (2014-2028)	7%	5%	3%
Value In Use	28.874.206	24.490.430	20.936.591
Market Value (Fair Value)	16.000.000	16.000.000	16.000.000
Recoverable Amount	28.874.206	24.490.430	20.936.591
Carrying Amount	26.554.000	26.554.000	26.554.000
Impairment Loss	NONE	2.063.570	5.617.409

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