Working Paper

108

Earnings Management by Means of Changes in Accounting Entities

-The Case of Tobu Railway Company-

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(July,2009)

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Abstract

Companies sometime hide liabilities or losses through changes in accounting entity. Although few textbooks deal with this topic, studying how to use changing entity is very important. In this case, we consider the Tobu Railway Company, which has benefited from industrial policy on several occasions through affecting changes in accounting entity. To ignore this aspect of the company in any analysis, investors and/or analysts attempting to analyze this company would misunderstand it. Through investigating a company's current accounting entity situation, we are sometimes able to quantify the benefits and/or changes attributed to the accounting entity.

The case described below is intended for undergraduate accounting students, graduate students, MBA students, CPAs, security analysts, and other business people who want to *increase their awareness of, and to improve* their business analysis techniques.

Introduction

Although extensive case materials have been produced for Business Analysis education, most of these materials have a North American or European bias, and few

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have been produced describing the activities of Asian companies. However, for comparative purposes, it is important for students at business schools in Asia to study the accounting behaviors of Asian multinational companies using Asian case materials. We have therefore decided to develop case materials describing the accounting activities of Asian companies.

Companies sometime hide liabilities or losses through changes in accounting entity. Although few textbooks deal with this topic, studying how to use changing entity is very important. In this case, we consider the Tobu Railway Company, which has benefited from industrial policy on several occasions through affecting changes in accounting entity. To ignore this aspect of the company in any analysis, investors and/or analysts attempting to analyze this company would misunderstand it. Through investigating a company's current accounting entity situation, we are sometimes able to quantify the benefits and/or changes attributed to the accounting entity.

The case described below is intended for undergraduate accounting students, graduate students, MBA students, CPAs, security analysts, and other business people who want to *increase their awareness of and to improve* their business analysis techniques.

Tobu Department Stores, which is a subsidiary of The Tobu Railway Company, incurred considerable unrealized capital losses on real estate because it bought a great deal of land during the bubble economy before land prices dropped. In addition, the Tobu Railway Group was at risk of posting considerable losses due to revaluation of fixed assets, which was required because Asset Impairment Accounting would become compulsory from the end of fiscal year 2005 (beginning March 2006). At the same time, the Land Revaluation Law (temporary legislation) was enacted in 1998, which permitted an increase in land valuation for a limited time period. Skillful utilization of this legislation would provide Tobu Railway Group with the opportunity to eliminate unrealized capital losses on land. However, land revaluation under the Land Revaluation Law was restricted to one application per company. Also, when applying the Land Revaluation Law, companies were required to revaluate all owned land; selective revaluation of only land with unrealized capital gains was not permitted. Since the Tobu Department Store subsidiary owned nearly no land with unrealized capital gains, the Finance Department of the Tobu Railway Company considered the possibility of eliminating unrealized capital losses on land for business use by skillfully applying the Land Revaluation Law.

Background

The area serviced by the Tobu Railway Company, which was founded more than 110 years ago in 1897 by the "Railway King", Kaichiro Nezu[3], is shown in Figure 1. Tobu Railway Company primarily services the Kanto Region where it operates routes in 1) the Tokyo Metropolis and eastern Saitama Prefecture (green area[4]), 2) central Gunma and Tochigi Prefectures, and 3) western Chiba Prefecture. By fiscal 2005, Tobu Railway Company had consolidated net sales of 646.3 billion yen and 20,483 employees. Table 1 shows a fiscal 2005 ranking of Japanese railway companies on the basis of net sales; Tobu Railway Company ranks 8th based on sales, and third among railway companies that have routes in the Kanto Region (company names shown in italics).

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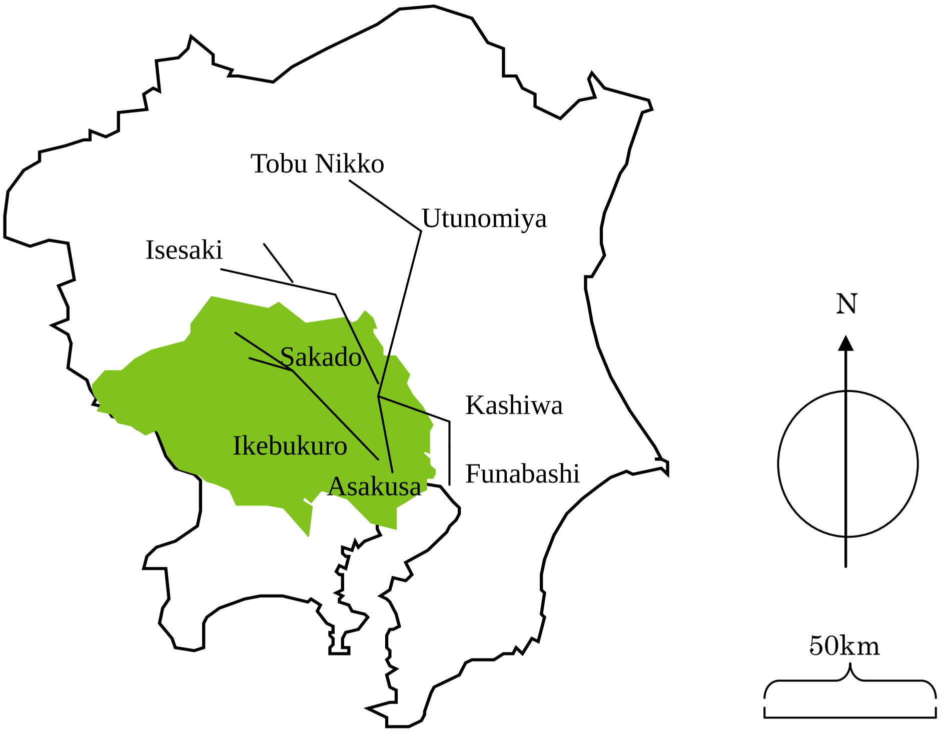
[3] Kaichiro Nezu is often referred to as the "Railway King" for having amassed considerable personal wealth through rehabilitating railway companies that fell into financial difficulty. He also undertook education projects to return to society profits generated by his railway business activities and opened Musashi University and Musashi High School.

[4] The word "Tobu" in Tobu Railway means "Eastern Musashi". It is derived from "Musashi," the former name for the area consisting of present-day Tokyo and Saitama Prefecture.

≪Figure 1≫ Service Area of the Tobu Railway Company



In addition to railways, the Company consists of a multifaceted corporate group that has operations in the leisure, real estate development, and retail distribution business sectors. Specifically, these operations consist of: 1) the transportation business, including rail, bus, and taxi services; 2) the leisure business, including tourism and hotels; 3) the real estate business, including property subdivision and rental; and, 4) the distribution business, including department stores located primarily in front of Tobu train stations.

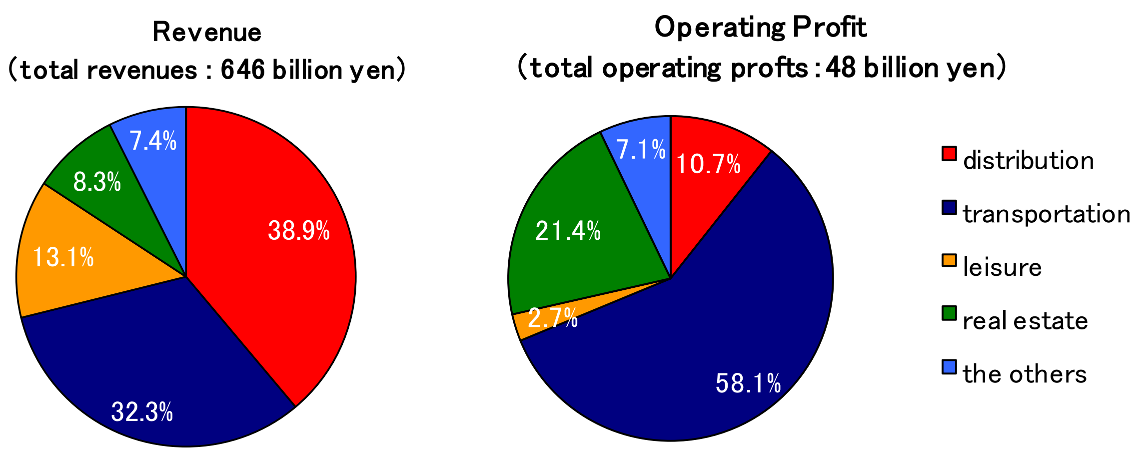
These four businesses are all closely related, and the business model employed by the Tobu Railway Company is based on increasing customer traffic by encouraging railway use. Specifically, the business model promotes the use of railways through the development and operation of amusement facilities, department stores, and residential properties near train stations; people use these facilities because of their proximity to

≪Table 1≫ Revenues and Operating Profits of Japanese Railway Companies

		Revenues	Operating profits	(billion yen)
1	*East Japan Railway Company*	2,592	396	
2	Central Japan Railway Company	1,467	404	
3	*Tokyu Corporation*	1,389	86	
4	West Japan Railway Company	1,240	135	
5	Kintetu Corporation	948	67	
6	Hankyu Hanshin Holdings	799	87	
7	Meitetu Group	740	39	
8	*Tobu Railway Company*	646	48	
9	*Odakyu Electric Railway Company*	610	36	
10	*Keio Corporation*	438	40	
11	*Seibu Railway Company*	435	30	

※ fiscal year ending March 2006

≪Figure 2≫ Revenue And Operating Profit By Business



the railway.

Figure 2 shows the breakdown of the company's activities in each business segment with respect to revenue and operating profit. The pie charts show the railway and distribution businesses[5] to be the core businesses of the Group, accounting for approximately 70% of the revenue base. They also show that the railway business alone accounts for approximately 60% of the operating profit of the company. It should therefore come as no surprise that the Tobu Railway Group makes extensive areas of land in all of its business activities, particularly for the core railway (Tobu Railway Company) and distribution businesses (Tobu Department Store).

The Accounting Problem

In Japan, the implementation of asset impairment accounting in accordance with the Accounting Standards for Impairment of Fixed Assets was only made obligatory from the fiscal year ending March 2006. At the time asset impairment accounting was implemented, in cases where the profit potential (including the land disposal amount) of a fixed asset (plants, land, etc. owned by a company) decreased and the prospects for recovery of the invested funds disappeared, the company was required to record this loss as the difference between the discounted present value of expected future cash flow generated by the fixed asset and the book value. On the other hand, a company was not permitted to increase its valuation of fixed assets for which profit potential had increased. The implementation of asset impairment accounting therefore posed a major problem for the Tobu Group given its considerable land holdings. In particular, Tobu

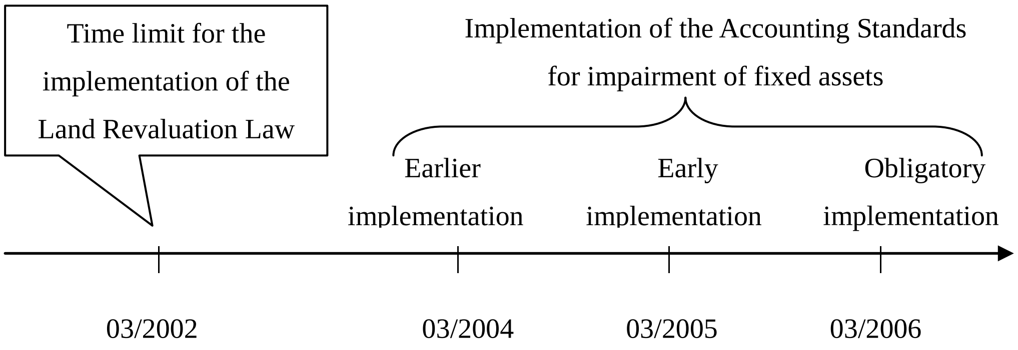
[5] Since the products handled in the distribution business (Tobu Department Store) have high unit prices, revenues from this business segment are high.

Department Stores had unrealized capital losses on land of fully 50.0 billion yen (equivalent to the total consolidated net income for 5 to 10 years). The Tobu Railway Company realized that Tobu Department Stores alone would incur considerable impairment losses if the company failed to deal with unrealized capital losses before fiscal year-end and the introduction of impairment accounting.

In anticipation of the potential difficulties associated with the introduction of the asset impairment accounting system, the government enacted the Land Revaluation Law in March 1998. The Land Revaluation Law permitted revaluation of land for business use at market prices by financial institutions and ordinary business corporations. However, the law, the purpose of which was to increase the sustainability of financial institutions, especially banks and to improve the corporate management environment, limited companies to only one revaluation of land to market prices. Corporations that applied the law were able to select one of five measures of market price: 1) the posted land price, 2) the benchmark land price as given in the National Land Use Planning Act, 3) the assessed value of fixed assets, 4) the roadside land price used for the assessment of inheritance tax, and 5) the appraised value by a real estate appraiser. The law required companies to record up to 60% of the difference between the market price and book value as the land revaluation difference for use as shareholders' equity (refer to the Appendix for a detailed description of the accounting treatment). There were two important considerations at the time of implementation of the Land Revaluation Law: 1) a company could only revalue land once, and 2) a company had to revalue all of the land that it owned. (In other words, a company could not selectively revalue land from which unrealized capital gains had been generated.)

Figure 3 depicts the implementation of the Land Revaluation Law and the implementation of the Accounting Standards for impairment of fixed assets over time. On the one hand, the time limit for the implementation of the Land Revaluation Law was the fiscal year ending March 2002. On the other hand, the implementation of asset impairment accounting was permitted from the fiscal year ending March 2004, and implementation was obligatory from the fiscal year ending March 2006 onward. That is to say, if Tobu Railway wished to avoid recording an impairment loss at the time asset impairment accounting was implemented nationally, then it would be necessary to implement the requirements of the Land Revaluation Law by the end of the fiscal year ending March 2002 in order to reduce, as far as possible, unrealized capital losses on land for business use[6].

≪Figure 3≫ Time Limits of the Law and Accounting Standard Implementation



Aims

The objectives of the Tobu Railway Group's Finance Department at the time of implementation of the new accounting measures were as follows:

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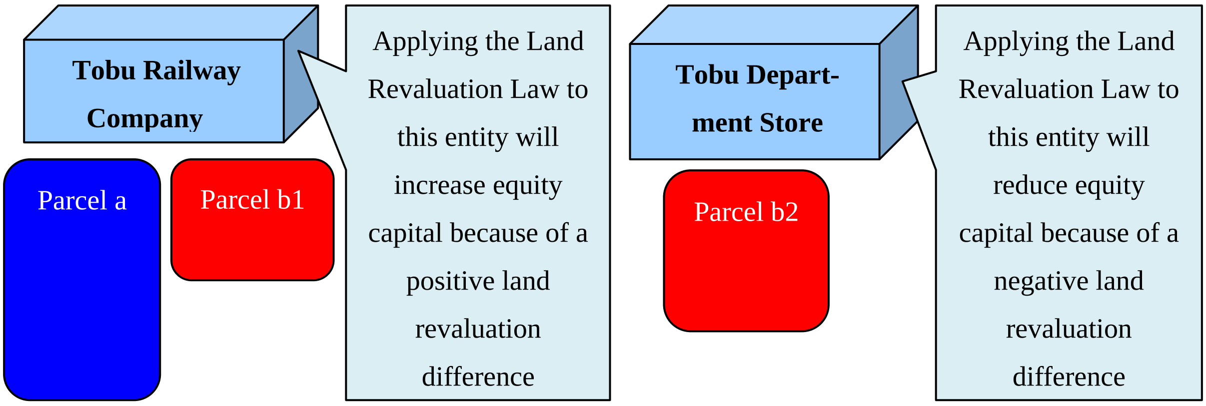
[6] Other companies also postponed the introduction of impairment accounting and strategically utilized the Land Revaluation Law. In the fiscal year ending March 2002, 280 companies revalued land according to the requirements of the Land Revaluation Law. A total of 453 companies revalued land using the Land Revaluation Law during the period leading up to the fiscal year ending March 2002.

≪Figure 4≫ **Land Ownership Structure of the Tobu Railway Group**



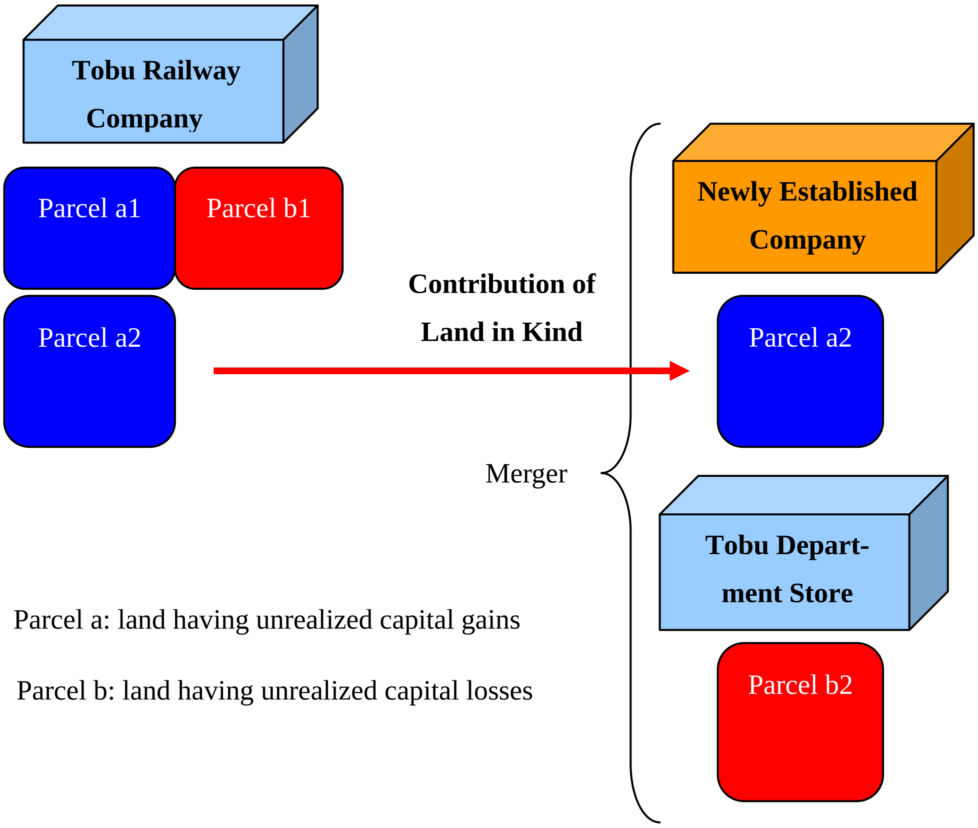
(※) Parcel a: land having unrealized capital gains / Parcel b: land having unrealized capital losses

1. To avoid incurring a substantial loss;
2. If possible, to achieve a year-on-year increase in profit; and
3. Selection of a method that would not have a major impact on earnings, taxable income, etc.

The most important consideration related to the implementation of the Land Revaluation Law by the Tobu Railway Group as a means of eliminating unrealized capital losses on land for business use was the legal requirement to revaluate *all* of the land owned by a corporation. Figure 4 shows the land ownership structure of the Tobu Railway Group. It can be seen that, whereas most of the land held by the parent company, Tobu Railway Company, had unrealized capital gains, Tobu Department Store only owned land having unrealized capital losses. This meant that the elimination of unrealized capital losses would therefore be impossible with this organizational structure, even if the requirements of the Land Revaluation Law were followed.

In response, Tobu Railway Company devised the plan shown in Figure 5, which involved selecting land owned by Tobu Railway Company with unrealized capital gains

≪Figure 5≫ **The Creation of a New Entity through the Contribution of Land in Kind**



(※) Parcel a: land having unrealized capital gains

Parcel b: land having unrealized capital losses

(Parcel a2), and then donating this land to a newly-established company formed through a merger with Tobu Department Store.[7] Since the unrealized capital gains and losses would correspond (Parcel a2 and Parcel b2 would correspond), satisfaction of the requirements of the Land Revaluation Law following the merger would make it possible to offset unrealized capital losses using unrealized capital gains.[8] Although the Land Revaluation Law required the revaluation of all of the land held by a corporation,

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[7] Tobu Railway Company used the pooling of interest method as an accounting procedure for business combination. As no accounting standard for business combination existed at the time in Japan, there was no need to satisfy particular requirements at the time of equity pooling; it was left to the discretion of companies as to whether or not they wished to adopt either the equity pooling method or the purchase method.

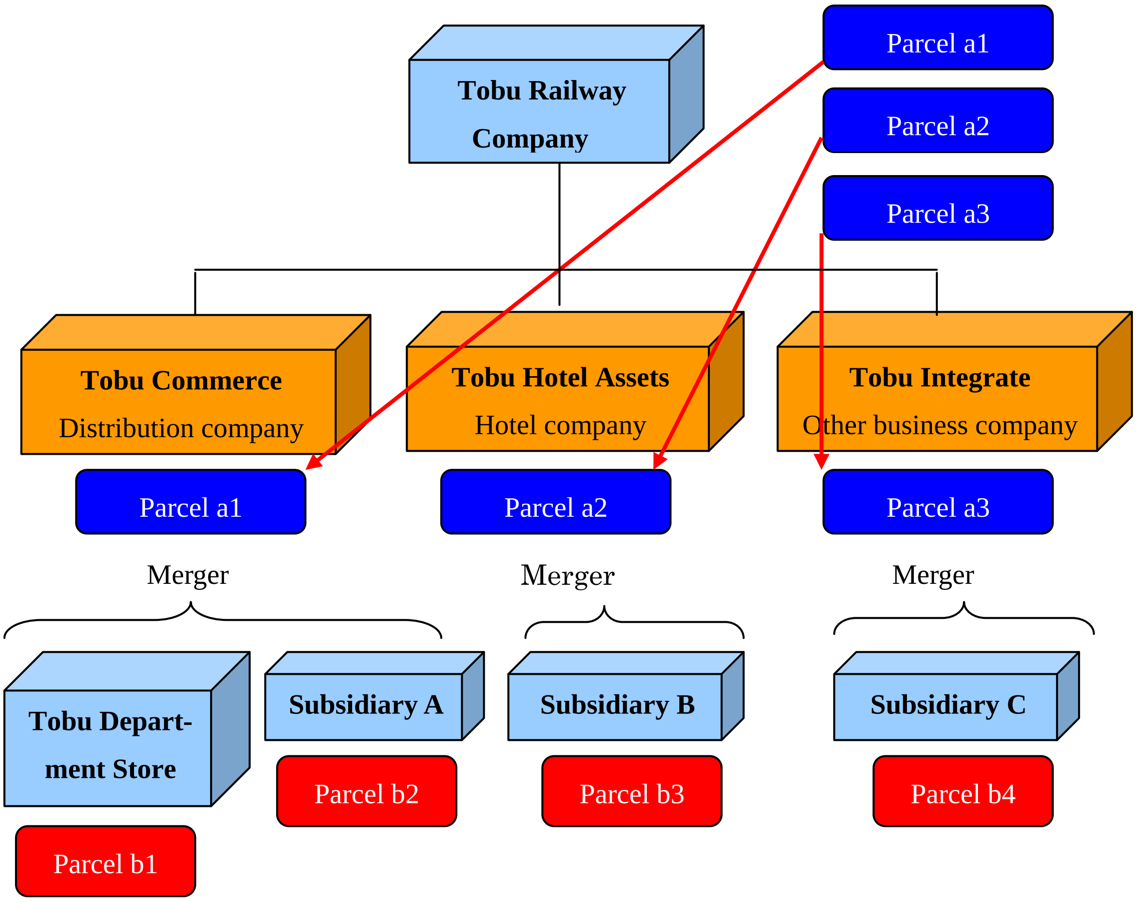
[8] Under Article 51 of the previous Corporation Tax Law and Article 93 of the previous Corporation Tax Law Enforcement Regulations, which prescribed accounting treatment concerning the establishment of subsidiaries by means of contributions of land in kind, in the case where a company established a subsidiary in which it owned 95% or more of the shares and had a controlling interest, transfers using the book value of the land as an equity contribution were permitted.

the creation of a new accounting entity through the contribution of land in kind would make the partial utilization of unrealized capital gains on land possible.

Tobu Railway Company devised a plan to use this technique at the start of the new financial year in April 2000 to eliminate unrealized capital losses on land incurred by the companies in the group, including Tobu Department Store. Figure 6 shows the planned corporate organization required to achieve this. The plan was for Tobu Railway Company to establish three types of subsidiary - a distribution company, a hotel company, and a company for other business activities - and providing these with land (Parcel a1, Parcel a2, and Parcel a3) with unrealized capital gains owned by Tobu Railway Company as contributions in kind. Tobu Railway Company would then merge the companies having unrealized capital losses on land into the new subsidiaries. The plan was thus to deal with unrealized capital losses on land by applying the Land Revaluation Law to the three new subsidiaries (Tobu Commerce, Tobu Hotel Assets, and Tobu Integrate) after implementing the mergers.

However, for the fiscal year ending March 2001 (fiscal 2000), the unrealized capital losses on land owned by Tobu Department Stores increased beyond initial projections, and it became highly unlikely that these losses could be offset using only the unrealized capital gains on land from the new distribution subsidiary (Tobu Commerce). In response to this situation, in its settlement of accounts for the fiscal year ended March 2001, the Tobu Railway Group abandoned the idea of newly established subsidiaries receiving contributions in kind and applied the Land Revaluation Law to the three new subsidiaries without implementing subsidiary mergers. That is to say, the settlement of accounts for the fiscal year ending March 2001 (fiscal 2000) passed with no pooling of unrealized capital gains on land in the new subsidiaries (Figure 7). Since the difference

≪**Figure 6**≫ **First Plan for Organizational Restructuring**

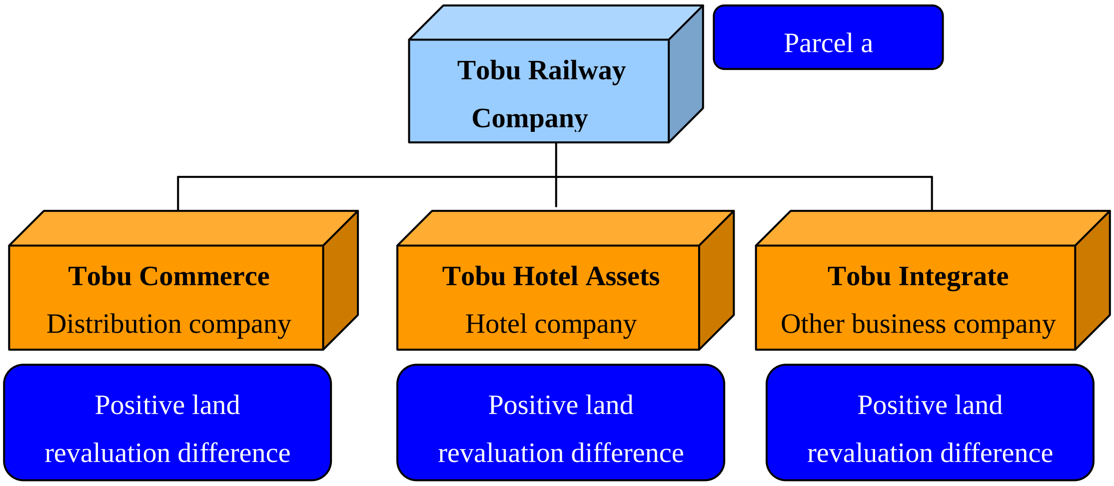


(※) Parcel a: land having unrealized capital gains / Parcel b: land having unrealized capital losses

in land revaluation amounted to approximately 81.8 billion yen in the consolidated financial statements for that fiscal year, a simple estimate suggests that the Tobu Railway Group implemented a write-up under the Land Revaluation Law equivalent to unrealized capital gains of approximately 136.3 billion yen[9]. Then, in preparation for the fiscal year ending March 2002 (fiscal 2001), the deadline for implementation of the Land Revaluation Law, Tobu Railway Group continued to search for ways to offset the unrealized capital losses on land carried by Tobu Department Stores. After the new

[9] 81.8 billion yen ÷ 0.6

《Figure 7》 **Modification to the First Plan for Organizational Restructuring**

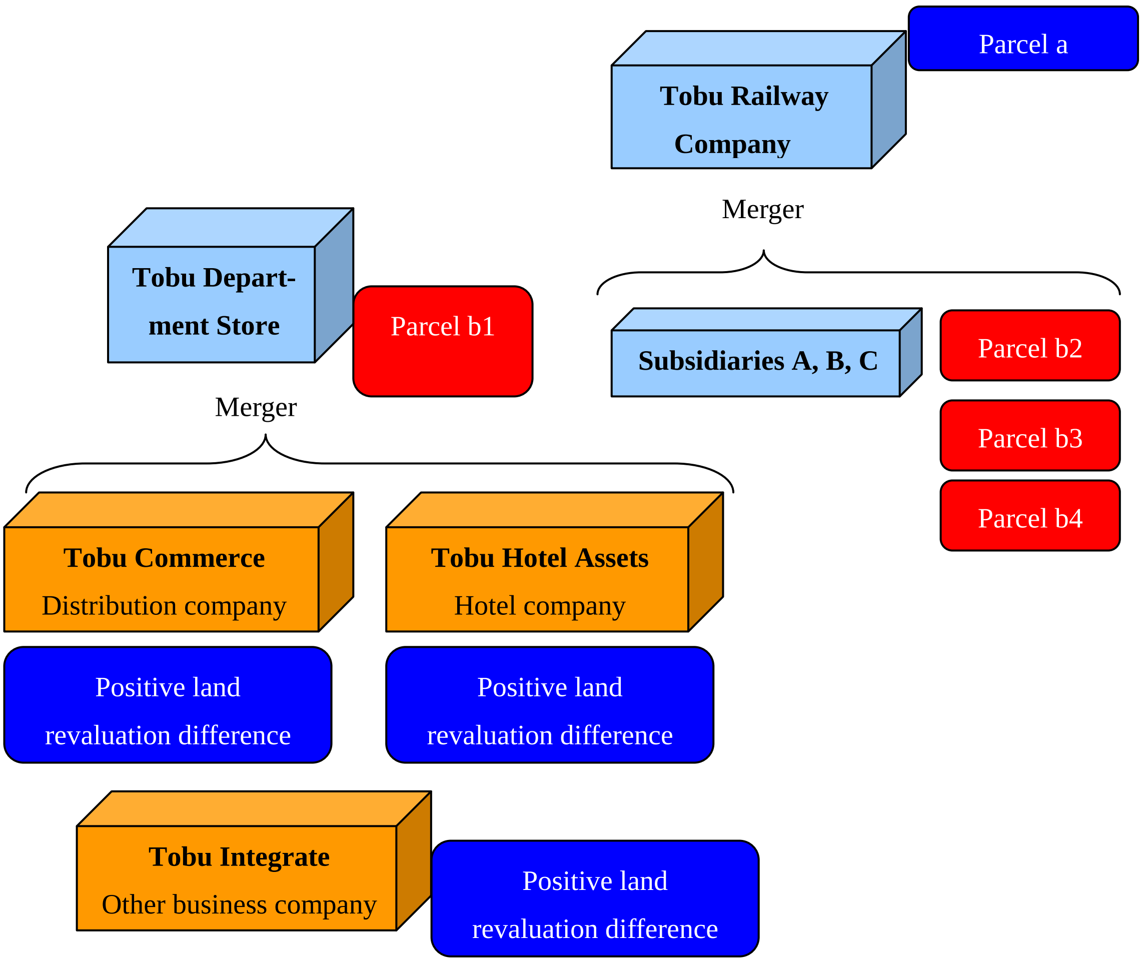


fiscal year began in April 2001, Tobu Railway Company devised a new accounting method for dealing with the issue of unrealized capital losses on land. At that time, the three newly established subsidiaries had already employed the Land Revaluation Law once. Since a company could only use the provisions of the Land Revaluation Law once, these three subsidiaries could not use the Land Revaluation Law again. However, because Tobu Department Store had not previously employed the provisions of the Land Revaluation Law, the Tobu Railway Company implemented the organizational restructuring changes shown in Figure 8 in preparation for the fiscal year ending in March 2002 (fiscal 2001), which was the deadline for the implementation of the Land Revaluation Law. The restructuring involved first merging the three newly established subsidiaries into Tobu Department Store, and then revaluating the land belonging to the new Tobu Department Stores company.

Simultaneously, Tobu Railway Group then merged other less well performing subsidiaries, which had land with unrealized profits that were insufficient for covering their own unrealized losses, into the Tobu Railway Company (excluding Tobu

Department Store), before applying the Land Revaluation Law to manage unrealized capital losses. As a result of these organizational changes, it is estimated that a land revaluation difference amounting to approximately 64.7 billion yen was reversed, and unrealized capital gains of approximately 107.8 billion yen[10] were applied to offset unrealized capital losses, even when the revaluation differences calculated of the Tobu Railway Company (approximately 34.1 billion yen) were considered.

≪Figure 8≫ Second Plan for Organizational Restructuring



[10] 64.7 billion yen ÷ 0.6

≪**Figure 9**≫ **Change in Earnings**

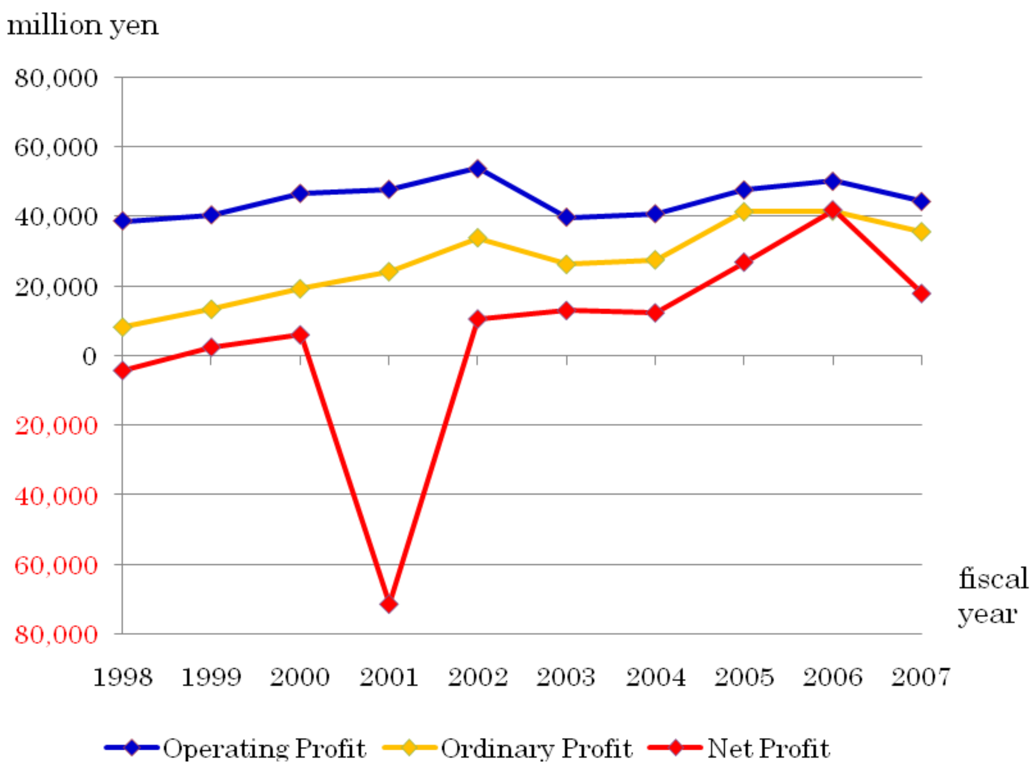
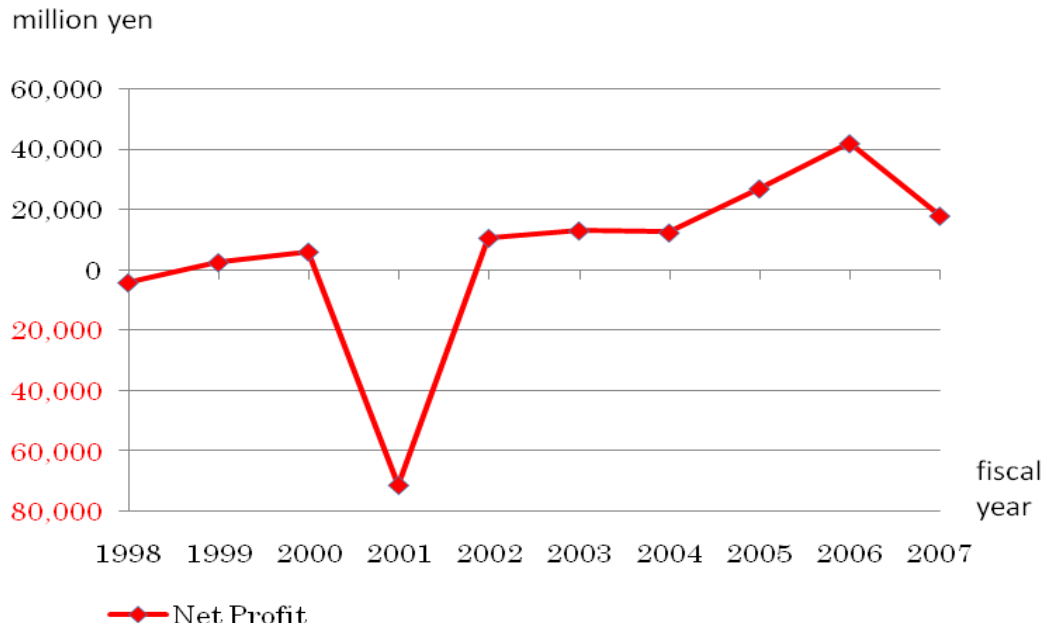


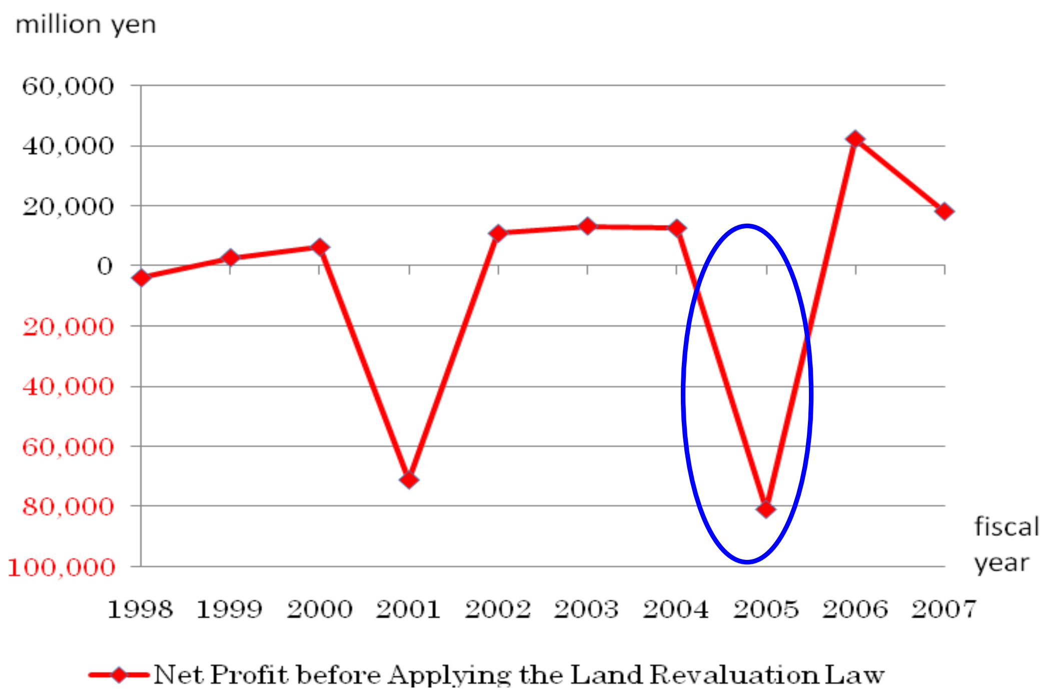
Figure 9 shows the changes in the earnings of the Tobu Railway Group. Earnings for the fiscal year ending March 2006 (fiscal 2005), the year of compulsory implementation of asset impairment accounting, showed an operating profit of 47,707 million yen, an ordinary profit of 41,294 million yen, and a net profit of 26,873 million yen. Although impairment loss is an extraordinary loss item that has an impact on net profit, as a result of utilization of the Land Revaluation Law to deal with unrealized capital losses in advance, the Tobu Railway Group limited the impairment loss in fiscal 2005 to 15,010 million yen, avoided recording a large net loss, and instead achieved an earnings increase (equalization of future earnings).

Still, in the fiscal year ending March 2002 (fiscal 2001), in addition to offsetting unrealized capital losses by applying the Land Revaluation Law, the Tobu Railway

≪Figure 10-1≫ **Change in Net Profit**



≪Figure 10-2≫ **Net Profit after Eliminating Bias Introduced by Manipulation of Entities**



Group recorded significant losses due to the disposal or elimination of non-performing assets, which resulted in the Group recording a net loss for the fiscal year ending March 2002 (fiscal 2001).

Figure 10-1 shows the change in net profit only; a financial indicator we selected for analyzing the impact of Land Revaluation Law implementation. For purposes of comparison, Figure 10-2 shows the projected change in net profit that would have occurred if the Tobu Railway Group had not applied land revaluation and the unrealized capital loss of approximately 107.8 billion yen had been actualized due to compulsory implementation of asset impairment accounting in fiscal 2005.

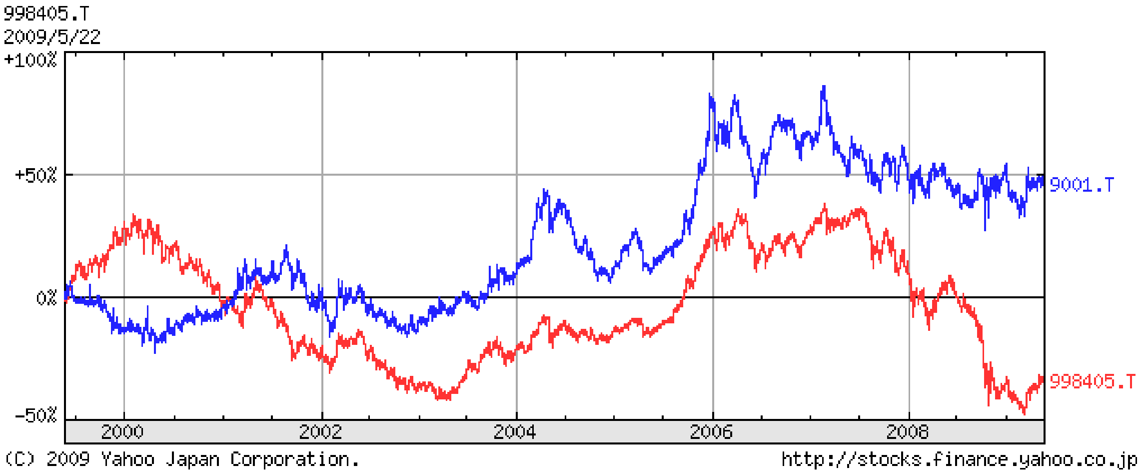
It can be estimated that, had the Tobu Railway Group not applied the Land Revaluation Law, the Group would have posted a net loss of approximately 80.0 billion yen in fiscal 2005.

Next, we will consider how the stock market assessed this change in earnings figures. Figure 11-1 shows change in the monthly price of Tobu Railway Company shares, and Figure 11-2 shows a comparison of the share price for Tobu Railway Company (blue) with the TOPIX (red)[11]. The graphs confirm that the share price increased in the fiscal year ending March 2006 (fiscal 2005), the year of obligatory implementation of asset impairment accounting, both with respect to raw data and in comparison with the TOPIX. In Figure 10-1 and Figure 10-2 we show the projected business results for the scenario in which the Tobu Railway Group did not deal with its unrealized losses on land through applying the Land Revaluation Law. Supposing that Figure 10-2 provides a true picture of the earnings of Tobu Railway Group, it is possible that the stock market was misled. That is to say, it is conceivable that the share price was decided on the basis of the

[11] TOPIX is an abbreviation for Tokyo Stock Price Index, a share price index calculated as a weighted average using the magnitude (the total market value) of the share prices of all companies listed on the First Section of the Tokyo Stock Exchange.

≪**Figure 11-1**≫ **Change in Monthly Share Price of the Tobu Railway Company**

≪**Figure 11-2**≫ **Comparison of Tobu Railway Company Stock Price and TOPIX**



treatment of unrealized capital losses even though the company's performance had not actually changed in reality.

Learning Objectives

Four lessons can be obtained from this case study:

1. Earnings can be manipulated by changing entities and the scale of the manipulations.
2. The details of actual discretion with respect to accounting earnings can be demonstrated.
3. Bias introduced by actual discretion can be eliminated from accounting figures.
4. The likelihood of whether share mispricing has occurred can be assessed by collating accounting figures after bias correction with the evaluation of the stock market.

Questions

1. If the Tobu Railway Group desired only to realize unrealized capital gains on land, several other approaches are conceivable. Consider what other methods are available. Consider also the reasons for the adoption of the Land Revaluation Law in this case rather than other methods.

   i) If the Tobu Railway Group had adopted the purchase method at the time of the merger with newly established subsidiaries by means of contributions of land in kind, land revaluation without implementation of the Land Revaluation Law would have been possible.

   Goodwill amounting to tens of billions of yen would have been recorded, and amortization of the goodwill would have become a drag on future earnings.

   ii) The sale and repurchase of land with unrealized capital gains would have made land revaluation possible.

   It would have been difficult to find a buyer, and profit on the sale of land and taxable income would be generated in the fiscal year of the sale (i.e. at a time when such a sale would not correspond to future impairment losses).

2. What do you think of the proposition, “The unrealized capital losses could have been eliminated if all subsidiaries had been merged into Tobu Railway Company and the Land Revaluation Law had been applied?”

3. A large net loss was recorded in the fiscal year ending March 2002 (fiscal 2001). Might a big bath have occurred? Obtain the annual securities report and discuss this possibility.

4. The railway industry is a regulated industry. Could the political costs hypothesis not apply here as motivation for recording the enormous loss mentioned in 3 above? Through a discussion of what the political costs hypothesis is, examine whether the receipt of government subsidies or an increase in railway fares occurred.

Appendix

It is said that implementation of the Land Revaluation Law enabled corporations to deal with unrealized capital gains and unrealized capital losses on land with no impact on the profit and loss statement. We journalize this below using a hypothetical example.

[Example]

Tobu Railway Company owns two parcels of land, Parcel A and Parcel B, and has applied land revaluation to the two parcels. The acquisition cost of Parcel A and Parcel B, and the market price of the land at the time of revaluation are shown below:

	acquisition cost	market price	difference
Parcel A	500	800	+300
Parcel B	700	500	- 200

Time of Implementation of the Revaluation Method

＜Revaluation of Parcel A＞

Debit		Credit	
Land	300	**Land revaluation difference** (Added to shareholders' equity)	**180**
		Deferred tax assets liabilities land related to revaluation	120

＜Revaluation of Parcel B＞

Debit		Credit	
Land revaluation difference (Subtracted from shareholders' equity)	**120**	Land	200
Deferred tax assets related to land revaluation	80		

＜Combined Journal Entries＞

Debit		Credit	
Land	100	**Land revaluation difference**	**60**
Deferred tax assets related to land revaluation	80	Deferred tax assets liabilities related to land revaluation	120

At the time of Parcel A revaluation, 60% of the unrealized capital gain is recorded as an increase in shareholders' equity (added to the land revaluation difference account), and

40% is treated as an increase in liabilities. At the time of Parcel B revaluation, 60% of the unrealized capital loss is recorded as a decrease shareholders' equity (decrease in the land revaluation difference), and 40% is treated as an increase in assets. That is to say, by pairing up Parcel A, which carries an unrealized capital gain, with Parcel B, which carries an unrealized capital loss, and applying the Land Revaluation Law, it is possible to offset 60% of the unrealized capital loss by means of addition and subtraction to an item in shareholders' equity (the land revaluation difference account).

Reference

Ito, K. (2003), *Introductory Financial Accounting (4th edition),* Nikkei-Publishing, Inc.

Ministry of Law (1998), *Act Concerning Revaluation of Land*, Ministry of Law.

Palepu, K. G., P. M. Healy, and V. L. Bernard (1999), *Business Analysis & Valuation: Using Financial Statements (2nd edition)*, South-Western College Publishing.

Yamada, J. (2008), *Accounting and Taxes for Organizational Restructuring* (3rd edition), Zeimukeiri Kyokai Co., Ltd.