A Study on Activity-Based Profitability Analysis (3)

Defining Operating Activities and Financing Activities

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1. Introduction

This is the last paper of a three-paper series. This paper reviews the definitions of the operating activities and the financing activities in the Palepu and Healy method and the Penman method, both of which were suggested in the United States. The differences between the two methods will be made clear through the review. Furthermore, suitability for the analysis of Japanese management style entities will be discussed. After looking into characteristics of Japanese management styles, matters to be considered when applying an alternative method to analysis of the Japanese management style entities will be discussed.

The first paper discussed that ROA or ROE, when used singly, may mislead the information users in judging profitability. Therefore, as a method that can resolve the problems of singly-used ROA and ROE, the traditional profitability analysis method was reviewed. The first paper also pointed out the problems of the traditional profitability analysis method.

The second paper discussed that the alternative profitability analysis method can resolve the problems in the traditional method, which the traditional profitability analysis method cannot. The alternative method presents us with more appropriate profitability by strictly distinguishing between the effects of the operating activities and the financing activities.

As discussed already, the alternative method attempts to provide ROA and ROE after distinguishing between the effect of the operating activities and the financing activities strictly. For this purpose, definitions of the operating activities and the financing activities are important, and should reflect the substance of the entity being analyzed, for the analysis to reveal appropriate profitability.

2. Definitions of the operating activities and the financing activities

There are two ways to explain a concept: (1) the extensional way and (2) the connotative way. The extensional way picks up items that belong to a certain group. The connotative way specifies properties that are shared by a set of items (extensions).

Extensional definitions of the operating assets and liabilities, and the financing assets and liabilities are shown in both the Palepu and Healy method and the Penman method. However, their connotative definitions are not shown in neither of the methods. This paper attempts to define the connotative definitions in each method, and derive the key concepts for defining the operating activities and the financing activities. This will be useful in applying the alternative method to the analysis of the Japanese management style entities.

2-1 Definitions in the Palepu and Healy Method

The extensional definitions in the Palepu and Healy method are as follows.

Table 1 Extensional Definitions in the Palepu and Healy Method

[category]	[definition]
financing assets:	cash and marketable securities in current assets.
operating assets:	all the other assets than financing assets.
financing liabilities:	short-term debt, current portion of long-term debt, interest bearing long-term liabilities
operating liabilities:	all the other liabilities than financing liabilities

Table 1 shows that operating assets and liabilities are defined as a complementary set. First, financing assets and liabilities are defined. Then, all the other assets and liabilities are defined as operating assets and liabilities. Based on these extensional definitions, the connotative definitions suggested here are as follows.

Table 2 Connotative Definitions in the Palepu and Healy Method

[category]	[definition]
financing assets:	Assets that are purchased in capital market for the purpose of short-term investments.
operating assets:	Assets that are generated in transactions in products market, and Assets that are necessary to realize the product market strategies.
financing liabilities:	Liabilities that are caused through financial market to collect funds for the purposes of: ● performing operating activities. ● investing to assets which are needed in operating activities.
operating liabilities:	Liabilities that are caused by transactions in products

	market, and Liabilities that are necessary to realize the product market strategies.

Operating assets and liabilities relate to the operating activities. Financing assets and liabilities relate to the financing activities. Therefore, we need to clarify how the Palepu and Healy method defines the operating activities and the financing activities. Some key concepts for distinguishing between these two kinds of activities are derived from the connotative definitions above.

One of the key concepts is "product market strategy". Product market strategies include operating management and investment management. The specific content of operating management is managing working capital, which is one of the most important aspects of business management.

Another key concept is "financial market policies". They include financial decisions and dividend policy. Based on financial decision-making, liabilities and equity are managed. Stated differently, financial decisions include decisions about how to finance funds from the two different financial sources.

The basic meaning of these two key concepts is derived from the connotative definitions. First, operating assets and liabilities relate to the operating activities. The operating activities relate to "product market strategies". Second, financing assets and liabilities relate to the financing activities. The financing activities relate to "financial market".

Furthermore, as for liabilities, financial liabilities are liabilities that relate to limited financing activities. These activities are "interest-bearing" activities. So, the Palepu and Healy method defines all "interest-bearing" liabilities as financing liabilities.

2-2 Definitions in the Penman Method

The extensional definitions in the Penman method are as follows.

Table 3 Extensional Definitions in the Penman Method

[category]	[definition]
FA (financing assets)	cash equivalents, short-term investments, long-term debt investments
OA (operating assets)	all the other assets, except FA
FO (financing obligations)	short-term borrowing, current maturities of long-term debt, long-term borrowing (bank loans, bonds payable, note payable), lease obligations, preferred stock

OL (operating liabilities)	all the other liabilities, except FO

The extensional definitions above are defined in the Penman method[1]. However, the connotative definitions are not defined in the Penman method. The connotative definitions are defined here. Table 4 summarizes the connotative definitions.

Table 4 Connotative Definitions in the Penman Method

[category]	[definition]
FA	Assets purchased in capital market for investment or speculation purposes in short-term or long-term.
OA	Assets acquired in transactions with customers and suppliers in the product and input market, and assets to realize operations embodied in firm's ideas.
FO	Liabilities occurring from financing through capital market for the sake of operation and investments in operation.
OL	Liabilities occurring in transactions with customers and suppliers in the product and input market, and liabilities to realize operations embodied in a firm's ideas.

From Table 4, the author of this paper assumes that there are key concepts for defining the operating activities and the financing activities in the Penman method. They are "capital market" and the "product and input market". The financing activities in the Penman method relate to the capital market. The operating activities relate to the product and input market.

The comparison between the Palepu and Healy method and the Penman method will be discussed in 2-3 to clarify the meaning of the above-mentioned key concepts.

2-3 Comparison between the Palepu and Healy Method and the Penman Method

The Palepu and Healy method and the Penman method are based on the same logic. Both the methods distinguish between the operating activities and the financing activities. The only difference is the way of distinguishing them. This was discussed in the previous paper in detail.

As seen in 2-1 and 2-2, the definitions of the financing assets and liabilities and the operating assets and liabilities are similar, but not the same. Through the detailed review of ROA and RNOA, the difference between the definitions in the Palepu and Healy method and those in the Penman method will be discussed.

Two pure profitability ratios focusing on the operating activities are operating ROA (the Palepu and Healy method) and RNOA (the Penman method). They are based on the same logic, but the definitions are different.　Table 5 shows the definitions.

Table 5 Two Profit-to-Capital Ratios with Focus on Operating Activities

The Palepu and Healy method	NOPAT	/	Net Asset
The Penman method	OI	/	NOA

The basic logic of operating ROA and RNOA is the same. They are a profitability ratio aimed at assessing the profitability that is not affected by the financing factor. Their numerator and denominator focus on the operating activities.

It is specifically discussed which items of the balance sheet are different between the Palepu and Healy method and the Penman method.　The components of net asset and NOA are discussed to reveal the difference in the definitions of the operating activities in each method.

First, net asset (the Palepu and Healy method) is discussed. Net asset is obtained by adding operating working capital (current asset) and net long-term assets (noncurrent asset). On the other hand, NOA (the Penman method) is obtained by subtracting OL from OA. Tables 6 and 7 show the items that make up net asset and NOA respectively to reveal the different items between the Palepu and Healy method and the Penman method.

Asset items in typical balance sheets are listed in Table 6. Assets defined as the financing assets are marked to highlight the differences between net asset components and NOA components.

Table 6 Comparison between the Palepu and Healy Method and the Penman Method: Asset

The Palepu and Healy Method		The Penman Method
■	cash and cash equivalent	■
	account receivables	
	note receivables	
■	securities	■
	goods and products	
	other inventories	
	advanced money	
	prepaid expense	
	accrued revenue	
	short-term loan	■
■	treasury stock	■

	deferred current assets	
	plant and equipment	
	machinery	
	land	
	goodwill	
	patent	
	software	
	other intangible assets	
	securities for investment	■
	contribution to capital	
	long-term loan	■
	long-term prepaid expense	
	investment real estate	
	deferred assets	

Likewise, typical liability items in the balance sheet are listed in Table 7. Liabilities defined as the financial liabilities are marked.

Table 7 Comparison between the Palepu and Healy Method and the Penman Method: Liability

The Palepu and Healy Method		The Penman Method
	note payable	
	account payable	
■	short-term borrowing	■
	commercial paper	
■	current installments of long-term debt	■
■	current maturities of bond	■
	money unpaid	
	accrued income tax	
	advances received	
	accrued income on installment sale	
	deposit received from employees	
	deferred tax liability	
■	bond	■
■	long-term borrowing	■
	long-term note payable	
	long-term account payable	
	allowance for retirement benefit for employees	
	other fixed liability	

There is no difference in liabilities between the two methods, but there are several differences in assets. The different items are (1) short-term loans, (2) securities for investment, and (3) long-term loans. The Palepu and Healy method defines them as operating assets. In contrast, the Penman method defines them as FA (financial assets). The Penman method defines the operating activities in a more limited manner.

3. Features of the Japanese management styles

The alternative method can present with the profitability that is not affected by the financing activities. However, can we adopt the alternative method for the analysis of Japanese management style entities as it is without any change? As mentioned already, the definitions of the operating activities and the financing activities should reflect the substance of the entity being analyzed, for the analysis to reveal appropriate profitability.

Japanese management styles have certain characteristics. This paper treats the ownership stake and royal shareholders as Japanese peculiar items. First, the ownership stake means that more than two business corporations hold each other's stocks. The purpose of the ownership stake is to avoid hostile takeover by stabilizing shareholders. The ownership stake is reported in a balance sheet as securities for investments. The item is a part of investment, but its nature is obviously different from other investments.

Second, the royal shareholder is sometimes called the long-term shareholder, strong shareholder, and stable shareholder. As can be inferred from their names, the royal shareholder has shares for a long-term, regardless of the corporate performance and the stock price movement. The companies that have close transactional ties with each other are likely to become the royal shareholders. The purpose of keeping the royal shareholder is also to stabilize the financial situation.

Therefore, stocks that are owned by the royal shareholders attribute to the ownership stakes. The purposes of the ownership stakes and the royal shareholders are to fortify the financing ground to avoid hostile takeovers. Thus, they are different from usual investments.

4. Conclusion

The author of this paper agrees more with the Penman method than with the Palepu and Healy method. As mentioned already, the aim of the alternative method is to distinguish between the operating activities and the financing activities to present with the profitability that is not affected by the financing activities. Because the Penman method distinguishes between them more strictly, it better achieves the aim of the alternative method. For this reason, this paper adopts the

Penman method for the analysis of the Japanese management style entities.

With regard to the definitions of the operating activities and the financing activities for the analysis of the Japanese management style entities, the ownership stake and the stocks owned by the royal shareholders should be treated as a factor in the operating activities.

Lastly, the Japanese accounting standards have been changing in the process of convergence to IFRS. We have to keep following what changes are to be made in the Japanese accounting standards further in the future, and this proposed method, which is based on the Penman method, will have to adapt to the changes to preserve and improve its ability to reveal appropriate profitability.

(Note)

1) cf. Penman(2007), p. 303

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