## Pension investment outlook

# The Downtrend of Value-Added Productivity 

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Corporate earnings peaked out around last summer. If the turnaround was largely due to the subprime loan crisis, the situation would not warrant much alarm. In fact, however, a larger problem exists in that value-added productivity is trending downward. The earnings recovery and expansion since 2002, which relied heavily on labor cost containment, is no longer sustainable. Looking ahead, a breakthrough is needed for stock prices to rise further.

Based on the Financial Statements Statistics of Corporations by Industry (Ministry of Finance), below we look at business results of the manufacturing sector. Exhibit 1 plots the value added of large corporations (with capital of 1 billion yen or over) from January-March (Q1) 1960 to the latest data for Q1 2008. Although not shown, results for the non-manufacturing sector are not very different.

We start by summarizing the trend in earnings performance, which does not appear on the graph. Operating profit at large enterprises (trailing four-quarters) bottomed out in Q2 2002 and began a rapid recovery. By Q3 2007, operating profit had soared to 2.5 times above the low point, and approximately 1.5 times above the high reached during the asset bubble era. However, it began declining in Q3 2007, and as of Q1 2008, has pulled back $6.3 \%$ from the high point.


[^0]This leads us to ask which factors had driven the earnings recovery and expansion from Q2 2002. The first factor is sales growth. Compared to the earnings low point in 2002, sales revenue had grown approximately $30 \%$ by the 2007 peak. However, since total assets also grew, the asset turnover improved only from $85.1 \%$ to $97.6 \%$ over the same period. This level is even lower than in the 1980s, indicating that asset efficiency has not been particularly good despite the earnings growth.

Next, we examine whether operating margins improved. As Exhibit 1 shows, value added (the total of operating profit, labor cost, and depreciation expense) has declined as a ratio to sales revenue. Moreover, the downtrend has persisted over the past decade. Companies generate value added by conducting business activities, and then distribute the value added among workers, owners and creditors, and the government in the form of taxes. What Exhibit 1 tells us is that generating and allocating one unit of value added requires an increasing amount of sales revenue. This is a serious problem indeed.

Ultimately, the sustained, strong earnings growth from 2002 has mostly relied on the plunging share of labor cost in value added. The share of depreciation expense has also edged down, but not significantly. In other words, the operating margin managed to keep growing as long as labor cost shrank as a proportion of value added (that is, the allocation to labor declined).

Since Q3 2007, factors supporting operating profit growth appear to be reversing course. Amid the ongoing decline of the value-added to sales ratio, labor cost has started rising as a share of value added. In addition, aggressive business fixed investment in the past (fueled by earnings growth) has caused depreciation expense to surge as a share of value added. Meanwhile, sales growth could not maintain the level necessary to sustain earnings growth, and so earnings eventually peaked out. Thus soaring commodity prices are not solely to blame for the weakness of earnings.

The above situation is also reflected in the trend of return on assets (operating profit / total assets). ROA rose from $2.6 \%$ in Q2 2002 (annual basis) to $5.8 \%$ in Q3 2007, which is comparable to the peak level reached in the bubble era. However, considering that the bubble era was characterized by the inefficient use of assets, this level is not necessarily high. In fact, ROA peaked out at around $8 \%$ in the early 1980s. This is the level that businesses should strive for.

If ROA improves, return on equity will follow suite, pushing stock prices upward. Indeed, the deceleration of stock price growth from early 2006 despite strong earnings growth may be partly attributable to the sluggishness of ROA.

To improve ROA in the future, it is necessary to improve asset efficiency and boost the total asset turnover, as well as to raise the valued-added to sales ratio by innovating new products (or services in the case of the non-manufacturing sector). Labor cost containment is no longer a viable option for improving ROA. Moreover, if limitations exist in improving ROA through expansion of domestic business activity, then companies must aggressively pursue business activity overseas and bring home the profits.


[^0]:    Notes: Value added is defined as the total of operating profit, labor cost, and depreciation expense. Shows trailing four-quarter values. Non-consolidated accounting basis.
    Source: MOF, Financial Statement Statistics of Corporations by Industry.

