

# COMPANY PERFORMANCE ANALYSIS AND STANDARDIZATION OF FINANCIAL STATEMENTS

Alin ARTENE<sup>1</sup>, Crăciun SABĂU<sup>1</sup>, Aura DOMIL<sup>2</sup>

<sup>1</sup>TIBISCUS UNIVERSITY OF TIMIȘOARA, FACULTY OF ECONOMICS

<sup>2</sup>WEST UNIVERSITY TIMIȘOARA

## **Abstract:**

*A good understanding and working knowledge of financial statements is desirable because these statements and the numbers derived from those statements are the primary means of communicating financial information both within the firm and outside the firm.*

**Key words:** *financial statements, balance sheet,*

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One important goal of the accountant is to report financial information to the user in a form useful for decision making. Ironically, the information frequently does not come to the user in such form because financial statements don't come with a "user's guide".

## **Standardizing Statements**

One obvious thing we might want to do with a company's financial statements is to compare them to those of other, similar companies. In most of the times it is almost impossible to directly compare the financial statements for two companies because of differences in size.

For example, Ford and GM are serious rivals in the auto market, but GM is much larger, in terms of assets, so it is difficult to compare them directly. For that matter, it is difficult even to compare financial statements from different points in time for the same company if the company's size has changed.

The size problem is compounded if we try to compare GM with Toyota. If Toyota's financial statements are denominated in yen, then we have size and currency differences.

To start making comparisons, we have to standardize the financial statements. One useful way of accomplishing this is to work with percentage instead of total dollars or Euro. The resulting financial statements are called common-size statements.

We consider, for easy reference, Prufrock Corporation's 2006 and 2007 balance sheets which are provided in Table 1. Using these, we construct common – size balance sheets by expressing each item as a percentage of total assets. Prufrock's 2006 and 2007 common – size balance sheets are shown in Table 2.

**Table 1:**

<b>PRUFROCK CORPORATION</b>		
<b>Balance Sheets as of December 31, 2006 and 2007</b>		
<b>( \$ in millions )</b>		
<b>Assets</b>	<b>2006</b>	<b>2007</b>
Current assets		
Cash	\$ 84	\$ 98
Accounts receivable	165	188
Inventory	393	422
Total	\$ 642	\$ 708
Fixed assets		
Net plant and equipment	\$ 2,731	\$ 2,880
<b>Total assets</b>	<b><u>\$ 3,373</u></b>	<b><u>\$ 3,588</u></b>
<b>Liabilities and owners' equity</b>		
Current liabilities		
Accounts payable	\$ 312	\$ 344
Notes payable	231	196
Total	\$ 543	\$ 540
Long-term debt	\$ 531	\$ 547
Owners' equity		
Common stock and paid-in surplus	\$ 500	\$ 500
Retained earnings	1,799	2,041
Total	\$ 2,299	\$ 2,591
<b>Total liabilities and owners' equity</b>	<b><u>\$ 3,373</u></b>	<b><u>\$ 3,588</u></b>

**Common Size Balance Sheets**

We notice that some of the totals don't check exactly because of rounding errors, and also the total change has to be zero because the beginning and ending numbers must add up to 100 percent.

Financial statements, in this form are relatively easy to read and compare. For example, just looking at the two balance sheets for Prufrock, we see that current assets were 19.7 percent of total assets in 2007, up from 19.1 percent in 2006. Current liabilities declined from 16.0 percent to 15.1 percent of total liabilities and equity to 72.2 percent.

Overall, Prufrock's liquidity, as measured by current assets compared to current liabilities, increase over the year. Simultaneously, Prufrock's indebtedness diminished as a percentage of total assets. We can conclude that the balance sheet has grown "stronger".

**Table 2:**

<b>PRUFROCK CORPORATION</b>			
<b>Common-Size Balance Sheets December 31, 2006 and 2007</b>			
<b>Assets</b>	<b>2006</b>	<b>2007</b>	<b>Change</b>
<b>Current assets</b>			
Cash	2.5%	2.7%	+.2%
Accounts receivable	4.9	5.2	+.3
Inventory	11.7	11.8	+.1
Total	19.1	19.7	+.6
<b>Fixed assets</b>			
Net plant and equipment	80.9	80.3	-.6
<b>Total assets</b>	<u>100.0%</u>	<u>100.0%</u>	<u>.0%</u>
<b>Liabilities and owners' equity</b>			
<b>Current liabilities</b>			
Accounts payable	9.2%	9.6%	+.4%
Notes payable	6.8	5.5	-1.3
Total	16.0	15.1	-.9
Long-term debt	15.7	12.7	-3.0
<b>Owners' equity</b>			
Common stock and paid-in surplus	14.8	15.3	+.5
Retained earnings	53.3	56.9	+3.6
Total	68.1	72.2	+4.1
<b>Total liabilities and owners' equity</b>	<u>100.0%</u>	<u>100.0%</u>	<u>.0%</u>

### **Common – Size Income Statements**

A useful way of standardizing the income statement shown in Table 3 is to express each item as a percentage of total sales, as illustrated for Prufrock in Table 4.

The income statement reveals us what happens to each dollar in sales. For Prufroc, interest expense eats up \$.061 out of every sales dollar, and taxes take another \$.081. After all is done \$.157 of each dollar flows trough the bottom line (net income), and the amount is split into \$.105 retained in the business and \$.052 paid out in dividends.

These percentages are useful in comparisons. For example, a relevant figure is the cost percentage. For Prufrock, \$.582 of each \$ 1.00 in sales goes to pay for goods sold. It would be intresting to compute the same percentage for Prufrock's main competitors to see how Prufrock stacks up in terms of cost control.

**Table 3:**

<b>PRUFROCK CORPORATION</b>		
<b>2007 Income Statement</b>		
<b>( \$ in millions )</b>		
Sales		\$ 2,311
Cost of goods sold		1,344
Depreciation		276
Earnings before interests and taxes		\$ 691
Interest paid		141
Taxable income		\$ 550
Taxes ( 34%)		187
Net income		<u>\$ 363</u>
Dividends	\$ 121	
Addition to retained earnings	242	

**Table 4:**

<b>PRUFROCK CORPORATION</b>		
<b>Common-Size Income Statement 2007</b>		
Sales		100.0%
Cost of goods sold		58.2
Depreciation		11.9
Earnings before interests and taxes		29.9
Interest paid		6.1
Taxable income		23.8
Taxes ( 34%)		8.1
Net income		<u>15.7%</u>
Dividends	5.2%	
Addition to retained earnings	10.5	

### **Using Financial statements Information**

Giving that we want to evaluate a division or a firm based on its financial statements, a basic problem immediately appears because we have to choose a benchmark, or a standard of comparison.

#### **Time trend analysis**

A first method we could use is history. If we found out that the current ratio for a particular firm is 2.4 based on the most recent financial statements information. Looking back over the last 10 years, we might find that this ratio had declined fairly steadily over that period.

Based on this, we might wonder if the liquidity position of the firm has deteriorated. It could be, that the firm has made changes that allow it to more efficiently use its current assets, that the nature of the firm's business has changed, or that business

practices have changed. If we investigate, we might find any of these possible explanations behind the decline.

#### Peer Group Analysis

The second means of establishing a benchmark is to identify firms similar in the sense that they compete in the same markets, have similar assets, and operate in similar ways, which means we need to identify a peer group. However there are problems with doing this: no two companies are identical.

One common way of identifying potential peers is based on Standard Industrial Classifications (SIC) codes. These are four digit codes for statistical reporting purposes. Firms with the same SIC code are frequently assumed to be similar.

### **Problems with Financial Statement Analysis**

One particularly severe problem is that many firms are conglomerates, owning more or less unrelated lines of business. A very good example is for the company GE – General Electric Company. The consolidated financial statements for such firms don't really fit any neat industry category.

Another problem that is becoming increasingly common is that major competitors and natural peer group members in an industry may be scattered around the globe. The automobile industry is an obvious example. The problem here is that financial statements from outside the United States do not necessarily conform to GAAP. The existence of different standards and procedures makes it difficult to compare financial statements across national borders. Even Companies that are clearly in the same line of business may not be comparable.

Several other general problems frequently appear. First, different firms use different accounting procedures – for example for inventory. This makes it difficult to compare statements. Second, different firms end their fiscal year at different times. For firms in seasonal business (such as retailer with a large Christmas season), this can lead to difficulties in comparing balance sheets because of fluctuations in accounts during the year.

Finally, for any particular firm, unusual or transient events, such as one – time profit from an asset sale, may affect financial performances. Such events give misleading signals as we compare the firms.

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