

# Horizontal and vertical analysis



Accounting is the way all companies keep track of their out-going and incoming finances. Applying accounting principles in any business is incredibly important because it allows for the least amount of mistakes and gives a comprehensive view of all transactions. There are many tools used in accounting, each with its own unique function. Statements are used to show a specific time period's overview of assets, liabilities, and all transactions. These statements allow for easier comparing of months, years, or even different companies accounts. Two of the tools of financial statement analysis are called vertical analysis and horizontal analysis. Much like the definitions of vertical and horizontal, these two analyses are similar but also have striking differences. In this paper, I will provide you with information regarding the two tools, vertical and horizontal analysis, and how comparing them is applied to two big businesses called PepsiCo, Incorporated, and Coca-Cola Company. When referring to vertical analysis, we are referring to when a total percentage is calculated for one financial statement.

As defined in "Accounting Coach" (2012), "A type of financial analysis involving income statements and balance sheets. All income statement amounts are divided by the number of net sales so that the income statement figures will become percentages of net sales. All balance sheet amounts are divided by total assets so that the balance sheet figures will become percentages of total assets," (Dictionary). Using vertical analysis is very helpful when comparing a company's percentages between statements, (Price, Haddock, & Brock, para. Vertical analysis of financial statements. It can also be helpful when comparing numbers of two companies that are within the same trade; such as the companies being compared in this paper:

PepsiCo, Inc., and Coca-Cola Company. Using vertical analysis will help us to compare how well each company did in certain accounts that were analyzed. The reason we want to do these comparisons is that it can sometimes be difficult to determine how much each statement is worth within a company or when compared to another larger or smaller company.

By converting them into percentages, it becomes effortless to compare and understand the information each statement gives. To perform a vertical analysis of PepsiCo we divide the current assets by the total assets. This will tell us what percentage of the assets in the company are current. To find this we divide the current assets, \$4, 882, by the total assets, \$31, 727, (University of Phoenix, 2008). By doing this math, we now know that the current assets make up 6. 5%. We will perform a similar problem to find what percentage of total assets is shareholder equity. Taking the total assets, \$31, 727, and dividing that by the shareholder equity, \$14, 320, we see that the shareholder equity makes up 2. 22% of the total assets. This can be done to all other accounts to find what percentage of total assets each account is. Below is the example of percentages of total assets that the current assets and shareholder equity make up. Two measures of vertical analysis- 1. Current assets divided by total assets-  $4882 / 31727 = 6. 5\%$  2. Shareholder equity divided by total assets-  $14320 / 31727 = 2. 22\%$

Vertical analysis of Coca-Cola will show us similar percentages to those of PepsiCo. We divide the total assets, \$29, 427 by the current assets of \$10, 250. From this, we now know that 2. 87% of the total assets are made up of current assets. Using the same equation, we substitute the current assets with the shareholder equity of \$16, 355, (University of Phoenix, 2008). By

dividing the total assets of \$29, 427 by \$16, 355 we are left with 1. 79%. This means that the shareholder equity makes up 1. 79% of the total assets of the Coca-Cola Company.

See the equations below:

Two measures of vertical analysis

1. Current assets divided by total assets-  $10250 / 29427 = 2. 87\%$

2. Shareholder equity divided by total assets-  $16355 / 29427 = 1. 79\%$

Differing from total percentages from one financial statement is horizontal analysis. According to “ Accounting Coach” (2012), “ This method involves financial statements reporting amounts for several years. The earliest year presented is designated as the base year and the subsequent years are expressed as a percentage of the base year amounts. This allows the analyst to more easily see the trend as all amounts are now a percentage of the base year amounts,” (Dictionary). Horizontal analysis is used to show profitability over certain time periods. When a company is able to tell the public or it’s investors that its assets increased by 12% since the previous year, that company is using the horizontal analysis to show where that 12% came from. This is especially helpful in comparing two companies like PepsiCo Inc and Coca-Cola Company. The reason it is helpful is quite simple. As previously explained, horizontal analysis allows for analysts to show how much an account has increased or decreased since the previous time period. When comparing PepsiCo and Coca-Cola, using horizontal analysis, we can view how much the revenues for each company have increased or decreased in 2004 or 2005. This enables investors to see the profit of a company and

gives insight into which companies are best to invest in. To perform a horizontal analysis of PepsiCo we will compare accounts from the year 2004 to 2005. By doing this we will get an idea of how much the assets and liabilities for PepsiCo have increased. In 2004 the current assets of the company were \$3, 445. In 2005, they increased to \$4, 822. This shows an increase of 1. %. Next, we will look at the liabilities. The current liabilities in 2004 were \$14, 464. They were raised to \$17, 476 in 2005. This shows an increase of 1. 21%.

These figures are shown below:

Two measures of horizontal analysis for PepsiCo, Inc.

1. Current assets in 2005 divided by current assets in 2004-  $4822 / 3445$

= 1. 4%

2. Current liabilities in 2005 divided by current liabilities in 2004-  $17476 /$

$14464 = 1. 21\%$

What we can infer from this information is that PepsiCo has increased both their assets and liabilities from 2004 to 2005.

There could be any number of reasons for this. Perhaps the company is responding to competition and increasing their assets and liabilities in anticipation of a higher ratio of consumers. We cannot judge what is best to invest in based solely on the information gained from this horizontal analysis. We must also compare numbers from the vertical analysis listed above. As we have done for PepsiCo, we will compare accounts for the Coca-Cola Company during the same years, 2004 to 2005. In keeping with our above-listed accounts, we will find the percentages of the assets and liabilities. In

2004, Coca-Cola's current assets were \$12, 281. The assets decreased to \$10, 250 in 2005, dropping by a percentage of 1. 2%. A similar comparison can be found for the liabilities. In 2004 Coca-Cola's current liabilities were \$11, 133. In 2005 we see a decrease to \$9, 836. This decrease in a percentage of 1. 13%.

The figures are shown below:

Two measures of horizontal analysis

1. Current assets in 2005 divided by current assets in 2004-  $10250 /$

$$12281 = -1. 2\%$$

2. Current liabilities in 2005 divided by current liabilities in 2004-  $9836 /$

$$11133 = -1. 3\%$$

Judging on the numbers, we can see that Coca-Cola had a decent decrease in both its assets and liabilities. This is a positive thing in the eyes of investors or potential investors because it can mean that the company is taking in less. Taking in less is something investors look for because an ideal company will be taking in very little and putting out substantially more. By performing vertical and horizontal analyses on two companies like PepsiCo, Inc, and Coca-Cola Company, we are able to get a look at how the numbers of both compare not only to previous years but to each other as well. As with any company, it is to be assumed that improvements will need to be made. Based on the numbers we show in the vertical analysis of both companies, it is safe to say that Coca-Cola has better-looking numbers. However, we cannot make our judgments solely on the percentages we concluded from the horizontal analysis. Simply because Coca-Cola's current assets and

liabilities lessened in percentage from 2004 to 2005 do not mean they are a wiser investing choice. It might obviously show that they did not add any assets or liabilities but what it does not obviously show is why. There could be any number of reasons.

I would suggest for Coca-Cola to try and improve its the percentage of shareholder equity within the company based on the information from the vertical analysis. Perhaps if investors see that others thought it a wise choice to put their money into the company, they will too. My suggestion for PepsiCo is based on the numbers from their horizontal analysis. Comparing PepsiCo to Coca-Cola shows that PepsiCo is taking in far too many assets and liabilities between its yearly periods. It is ideal for them to take in the same, or even less. Adding more assets and liabilities can mean that the company is not doing as well as they previously were. An investor wants to see a company putting out much more than they are taking in. Higher liabilities and assets can mean the opposite is happening. PepsiCo would be making a wise choice if they avoid increasing those accounts. Comparing accounts, statements, and percentages within a company or to another company are made much easier with tools such as vertical and horizontal analyses. To compare numbers and percentages within a company, vertical analysis is the tool needed. Taking that comparison one step farther by including other companies is why we have horizontal analysis. PepsiCo, Inc. Coca-Cola Company has been compared and helpful suggestions have been made for each company to improve. It is important to remember that The information received from the two types of analyses can influence investors and

potential clients alike. Maintaining balanced percentages with increasing and decreasing values where necessary is the key to financial success.

## References

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