**[Unit 4 Assignment](https://post.blackboard.com/webapps/assignment/uploadAssignment?content_id=_4016841_1&course_id=_79545_1&group_id=&mode=view)**

Assignment: Finance and Operations: This week we look at finance and operations, and apply a bit of quantitative analysis to the effort.

Your assignment this week is to analyze current financial ratios for a given business. APA formatting required.

1. Think of a specific business you find interesting, i.e. Apple, UTC, Southwest Airlines, etc.

2. Search the web for that business’ “Financial Statement”. (You will find many hits for the data.)

3. Select the “<http://www.morningstar.com/>” site offering your company’s financial statement.

4. You will now see a number of financial ratios for your company. Below is an example for Apple:<http://financials.morningstar.com/ratios/r.html?t=AAPL>

5. Now, define the following ratios, note the ratio for your business, and explain what the ratio means for the business moving forward:

a) Return on Assets

b) Return on Equity

c) Return on Capital

d) Gross Margin

e) SG&A Margin

f) Current Ratio

g) Quick Ratio

h) Total Debt/Equity

i) Total Revenue

j) Gross Profit

Here are some additional sources as well. You can always do a quick search on Google using the appropriate keywords in your search.

Apple (Return on Assets):

<https://ycharts.com/companies/AAPL/return_on_assets>

<https://www.stock-analysis-on.net/NASDAQ/Company/Apple-Inc/Ratios/Profitability/Quarterly-Data#Ratios-Summary>

ANSWER for Amazon (AMZN)

The business under consideration is Amazon. We are considering the ratios for the year ending 12/2016. The key ratios are as under.

http://financials.morningstar.com/ratios/r.html?t=AMZN&region=usa&culture=en-US

|  |  |
| --- | --- |
| RATIOS | DATA |
| a) Return on Assets | 3.19% |
| b) Return on Equity | 14.52% |
| c) Return on Capital | 8.42% |
| d) Gross Margin  | 35.09% |
| e) SG&A Margin | 20.06 |
| f) Current Ratio | 1.04 |
| g) Quick Ratio | 0.78 |
| h) Total Debt/Equity | 0.79 |
| i) Total Revenue | 135,987 million |
| j) Gross Profit | 47,722 million |

Return on assets is the ratio of net income attributable to shareholders and total assets of the company. The ROA of AMZN is showing an increasing trend since 2008 and is yielding good return on assets at 3.19%. It shows the efficiency of management in generating income from its assets.

Return on equity is the ratio of net income attributable to shareholders and shareholder’s equity. At 14.52% it shows that the shareholders are receiving a healthy return on the amount invested by them.

Return on capital is the ratio of after tax operating income and book value of both debt and equity which is the total capital invested. At 8.42% AMZN is getting a healthy return on the capital invested.

Gross margin is the ratio of gross profit to total revenue. At 35.09% again, it seems to be quite high. An industry analysis and comparison however required to ascertain whether it is satisfactory.

The SG&A margin falls down to 9.98%. This implies that the amount of SG&A expenses are 920.06% of Sales which seems reasonable and is not startling.

A current ratio of more than one implies that the company has sufficient current assets to meet its current liabilities. Since the ratio is not too high also, it seems that the company is making efficient use of its current assets and is not having excess assets also.

A quick ratio of 0.78 implies that the quick assets or cash equivalents are not sufficient to meet its immediate liabilities. This may create liquidity problems and result in defaults.

Debt equity ratio of 0.79 indicates the proportion of debt and equity mix in the company financing is almost 50-50. Thus, the shareholders equity is almost double of the debt. Still, it can be said that the company is using a huge amount of debt for financing its needs and this can be a cause for alarm.

The total revenue and gross profit indicate a good gross margin ratio. However, like discussed earlier, the soundness can only be concluded with a careful industry comparison.

Gross profit