The **first competency** is **Firm Valuation** – competency 3015.1.6: **Capital Management**. Competency to an ability to determine the worth of a firm. In Task 2 quarter 7 in “The Bike” facilitated performance in the business simulation using this competency. From the “Stockholder Report” that I generated see the following: **Valuation of “The Bike” with key components.**

What was the justification for the multiplier of “10”? The process involved analyzing data in the following financial statements which are factors that increase the valuation multiple. The first point involved a high Cumulative Balanced Scorecard above the norm in the 6th quarter of 0.499 with Cumulative Financial Performance of 24.21. The second point involved the highest Balanced Scorecard in industry “The Bike” improving in quarters 4 through 6th showing the Balanced Scorecard in the 6th quarter for Total Performance 9.608 with Financial Performance 68.791. The third point “The Bike” Reputation Score from Stakeholder Survey in 6th quarter score of 71 improvements from 5th quarter 66 score and 4th quarter score of 58. The fourth point “The Bike” in the Conscious Scorecard in quarters 4 through 6 showed that Quality Inspections were made, addressed environmentally concerns in quarters 5 & 6, working training addressed to improve productivity, R&D further improvements to the bike product in the 6th quarter, and health concerns for employees addressed in the 6th quarter. On the fifth point the Market Share in the 6th quarter showed 15.74% with high market demand of 5,642. The sixth point there were significant sales of more than one million which reflected Sales Revenue in the 6th quarter of $6,889,207. The seventh point was that the Income Statement showed at least a million in profits in the 6th quarter net income of $1,429,256 with EPS of 29. The eighth point Cash Flow Cash Balance showed significant ending balance numbers with 4th quarter $3,811,025, 5th quarter $3,481,633 & 6th quarter $4,060, 890. The ninth point shown in the Balance Sheet with balances in the 4th quarter $6,131,025, 5th quarter $6,901,633 & 6th quarter $7,330,890. And lastly the tenth point in the 6th quarter was Operating Capacity 88%, Production Productivity without overtime of 82.7% and Fixed Capacity 99.17%, showing improvements from the 4th and 5th quarters of at least 25%. The “10” point valuation multiplier shows excellent income sales growth with market capitalization with excellent results shown in the quarter 6 Cumulative Balanced Scorecard in the Total Performance and Financial Performance justification for the high multiplier.

The steps in calculating the valuation involved using the multiplier as discussed above of “10”. Calculate the EPS to the outstanding shares of stock for “The Bike” assuming in the valuation that all net income from quarter 6 would be available for distribution to shareholders. The valuation multiplier of “10” was chosen based on the points discussed above showing a very promising estimate of current and potential business performance. In this discussion “The Bike**”** EPS of 29 for the 6th quarter multiplied by the price multiplier of “10” and this will be the estimated market value of each owner’s stock share. Since “The Bike” has a positive Q6 Earnings Per Share (EPS) we will use the **Simple Multiplier Method**. Then copy information from the Stock History Excel spreadsheet for Quarter 6. Note the total shares and total amount (Initial Value of Investment Amount for ROI). Then Multiply the fair market value per share of stock from step 3, will get calculated value is your Estimated Value of the Firm. The estimated value result of the firm valuation was **$14,500,000.**

The skills you have learned all contribute to an ability to determine the worth of a firm. This valuation is based on the value of its assets and effectiveness of its operations. To gain a full understanding of a firm’s valuation, application of other measures of asset return and risk should be utilized.

This topic addresses the following competency:

* **Competency 3015.1.6: Capital Management**  
  The graduate demonstrates the management of working capital to achieve the appropriate value for the firm.

This topic highlights the following objectives:

* Describe the basics of asset-pricing models that are alternatives to the capital asset-pricing model.
* Describe the implications of behavioral finance in financial decision-making.

The venture capitalists want to know the value of your company. That is, if you were to sell your company at the end of Quarter 6, what is its value? You may want to review [14.1 Firm Valuation Introduction](https://lrps.wgu.edu/provision/26427091) from Financial Management for information on various approaches to firm valuation. Although several valuation methods are available, and you should understand them for real world application, for the purpose of the simulation task you will use a simplified method based on the information available in the business simulation. Watch the [Simplified Valuation video](https://wgu.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=40475016-7e5f-447f-bfe4-ab6e01690d3c) to learn how to create a valuation for your company.

Investors are also interested in a return on their investment (ROI) in your company. In order to show the return to the investors, you will compute a projected Quarter 6 return on investment.. You will need to explain how it might influence possible investors (positively or negatively).

The **second competency** is **Financial Statement Cash Flow** – competency 3015.1.2: **Financial Statement Analysis**. Competency to track the sources and uses of funds from operations, financing, and investing activities. In Task 2 quarter 7 in “The Bike” facilitated performance in the business simulation using this competency. From the “Stockholder Report” that I generated see the following: Operating Cash Flows using the Direct Method. The direct method, in which “The Bike” records all transactions on a cash basis and displays the information using actual cash inflows and outflows during the 6th quarter accounting period. Operating expense items included in the presentation of the direct method of operating cash flow for the “The Bike” include:

|  |  |
| --- | --- |
| - Rebates | 79,500 |
| - Production | 2,783,045 |
| - Research and Development | 545,685 |
| - Quality Costs | 200,069 |
| - System Improvement Costs | 490,090 |
| - Advertising | 453,510 |
| - Internet Marketing Expenses | 47,000 |
| - Sales Force Expense | 355,104 |
| - Store Expense | 74,000 |
| - Marketing Research | 15,000 |
| - Shipping | 61,770 |
| - Excess Capacity Cost | 58,927 |
| - Income Taxes | 0 |
| + Interest Income | 0 |
| - Interest Charges | 146,250 |
| + Other Income | 0 |
| - Other Expenses | 0 |

Total operating expense cash outflow $5,309,950

Total operating revenue cash inflow $6,889,207

**Operating Cash Flow during 7th quarter**  $1,579,256

This method is simpler than the indirect method because there are fewer factors to consider. However, it only accounts for cash revenues and expenses. It is calculated with the formula:

**OCF = Cash Revenue — Operating Expenses Paid in Cash**

**OCF of $1,579,256 = Cash Revenue inflow of $6,889,207 – Operating expense cash outflow of $5,309,950**

1. **Cash from investing activities:** \*\*

Cash flow from investing activities for “The Bike” is a section of the cash flow statement that shows the cash generated or spent relating to investment activities. Investing activities include purchases of physical assets, investments in securities, or the sale of securities or assets. The Investing cash flow statement for “The Bike” is as follows:

**Investing Activities:**

No cash inflows $0

No cash outflows $0

**Cash generated by Investing Activities**  $0

1. **Cash from financing activities:** \*\*

“The Bike” cash flow from financing activities a section of cash flow statement, which shows the net flows of cash that are used to fund the company. Financing activities include transactions involving debt, equity, and dividends.

**Financing Activities:**

Cash outflows repay Conventional Loan $1,000,000

Cash inflows $0

**Cash generated by Financing Activities**  ($1,000,000)

1. **Final analysis for Statement of Cash Flows during the 7th quarter for “The Bike”**

**Beginning Cash Balance 6th quarter $3,481,634**

**Operating Cash Flow during 7th quarter $1,579,256**

**Cash generated by Investing Activities 7th quarter $ 0**

**Cash generated by Financing Activities 7th quarter ($1,000,000)**

**Ending Cash Balance 7th quarter $4,060,890**

Financial Statements: Cash Flow

The cash flow statement is the third of the three major financial statements used by a financial manager. Such statements allow you to track the sources and uses of funds from operations, financing, and investing activities.

This topic addresses the following competency:

* **Competency 3015.1.2: Financial Statement Analysis**  
  The graduate evaluates company performance based on financial statements and other measures ~~i~~n order to provide recommendations.

This topic highlights the following objectives:

* Explain the relationship of environmental factors to the recording and classification of cash flows for decision-making.
* Differentiate between net income and cash flow, including understanding the components of the cash flow statement.
* Calculate cash flows from operations, investments, and financing given appropriate data.
* Explain how changes in line items on the finance statements affect the calculation of cash flow from operations.
* Calculate free cash flow and cash flow from operations based on sources of financial information.

The **third competency** is **Financial Ratio Analysis**– competency 3015.1.3: **Valuation Skills**. Competency to an ability to use financial ratios to judge the performance of the company over time based on leverage, efficiency, productivity, and liquidity. In Task 2 quarter 7 in “The Bike” facilitated performance in the business simulation using this competency. From the “Stockholder Report” that I generated see the following: Liquidity Ratios – **Quick Liquidity Test Ratio**: Definition and calculation for Quick Liquidity Test Ratio marketplace measures equals (Cash plus three-month Certificate of Deposit divided by Conventional Bank Loan plus Emergency loan) measures a company's short-term liquidity against its short-term obligations. Therefore, the ratio seeks to figure out if “The Bike” has enough liquid assets (cash or things that can easily be converted into cash) to cover its current liabilities and impending debts. In the 6th quarter “The Bike” had a 1.04 Quick Liquidity Test Ratio; therefore, “The Bike” had a sufficient $1.04 worth of liquid assets on hand to cover every $1 of current obligations -**comparable which is the same** to current industry average of 1.04, high 1.04 & low 1.04; “The Bike” with Balance Sheet data of Cash $4,060,890 and Conventional Loan $3,900,000 in the 6th quarter. In the 5th quarter “The Bike” had a Quick Liquidity Test Ratio of 0.71 **comparable which is the same t**o the 5th quarter industry average of 0.71, high 0.71, & low 0.71; therefore, “The Bike” had $.71 worth of liquid assets not sufficient to cover every $1 of current obligations with Balance Sheet data of Cash $3,481,522 and Conventional Loan $4,900,000. In the 4th quarter “The Bike” had a Quick Liquidity Test Ratio of 1.36 the same **comparable which is the same** as the industry average of 1.36, high 1.36 & low 1.36 which indicated that “The Bike” had $1.36 worth of liquid assets sufficient to cover every $1 of current obligations with Balance Sheet data Cash $3,811,025 and Conventional Loan $2,800,000. “The Bike” during the 6th and 4th quarters was sufficient in meeting the company's short-term liquidity against its short-term obligations. Activity Ratios – **Fixed Asset Turnover:** Definition and calculation for Fixed Asset Turnover marketplace measures equals (Revenues divided by Net Fixed Assets) reveals how efficient a company is at generating sales from its existing fixed assets. In the 6th quarter “The Bike” had a 2.11 Fixed Asset Turnover Ratio which means higher the asset turnover ratio, the more efficient a company is at generating revenue from its assets in relation to the **comparable** current industry average 2.64, high 3.35, & low 2.11 in comparison to competitors “The Bike” is 20% lower in Fixed Assets; the corresponding Income Statement data of Revenues of $6,889,207 and Balance Sheet data for Net Fixed Assets of $3,270,000 for quarter 6 indicated that “The Bike” sufficient in generating revenue from its assets. Conversely, if a company has a low asset turnover ratio, it indicates it is not efficiently using its assets to generate sales. In the 5th quarter “The Bike” had 0.81 Fixed Asset Turnover Ratio comparable to industry average of 1.56, high 2.39, & low 0.81 in comparison to competitors “The Bike” is 48% lower in Fixed Assets; with corresponding Income Statement data of Revenues of $2,779,100 and Balance Sheet data for Net Fixed Assets of $3,420,000 for quarter 5 indicated that “The Bike” insufficient in generating revenue from its assets not efficiently using its assets to generate sales. In the 4th quarter “The Bike” had Fixed Asset Turnover Ratio of 0.34 comparable to industry average of 0.66, high 1.10, & low 0.34 in comparison to competitors “The Bike” is 48% lower in Fixed Assets; with corresponding Income Statement data of Revenues of $787,175 and Balance Sheet data for Net Fixed Assets of $2,320,000 for quarter 4 indicated that “The Bike” insufficient in generating revenue from its assets not efficiently using its assets to generate sales. “The Bike” in quarters 5 to 4 was not utilizing Fixed Assets in generating sales revenue efficiently. Leverage Ratios – **Debt Ratio:** Definition and calculation for Debt Ratio marketplace measures equals (Loans divided by Total Assets multiplied by 100) therefore; a debt ratio of greater than 1.0 or 100% means a company has more debt than assets while a debt ratio of less than 100% indicates that a company has more assets than debt. In the 6th quarter “The Bike” had a 53.2% ratio in relation to the comparable current industry average of 10.64, high 53.20, & low 0 comparison to competitors “The Bike” was 5 times the industry average; for The Bike” this means that for each $1 owned by “The Bike” owes in debt $.53 cents indicating sufficient assets: with corresponding Balance Sheet data Total Assets of $7,330,000 and Conventional Loan $3,900,000 in quarter 6. In the 5th quarter “The Bike” had a 71.0% Debt ratio in relation to the comparable industry average of 14.20, high 71.0 & low 0 comparison to competitors “The Bike” was 5 times the industry average, which means that for each $1 owned by “The Bike” owes in debt $.71 cents indicating sufficient assets: with corresponding Balance Sheet data Total Assets of $6,901,633 and Conventional Loan $4,900,000 in 5th quarter. In the 4th quarter “The Bike” had a 45.67% Debt ratio in relation to the comparable industry average of 9.13, high 45.67, & low 0 comparison to competitors “The Bike” was 5 times the industry average, which means that for each $1 owned by “The Bike” owes in debt $.46 cents indicating sufficient assets: with corresponding Balance Sheet data Total Assets of $6,131,025 and Conventional Loan $2,800,000. “The Bike” in quarters 4 to 6 was successful in utilizing enough Debt to offset Total Assets in strategic planning thrusts in growth for the company. Profitability Ratios **– Return on Paid-In Capital:** Definition and calculation for Return on Paid-In Capital marketplace measures equals (Net Income divided by Common Stock plus Retained Earnings multiplied by 100) therefore; measures how good a business is at generating profits from capital a larger chunk of profits can be invested back into the company for the benefit of shareholders. In the 6th quarter “The Bike” had a 41.66% ratio comparable to current industry average of 38.32, high 41.66, & low 33.17 comparison to competitors “The Bike” had a higher Return by 9% compared to competitors which indicates that most seasoned investors would choose to invest in a company with higher Return on Paid-In Capital compared to a company with lower ratios; therefore with corresponding Income Statement data of Net Income $1,429,256 and Balance Sheet Data of Common Stock $5,000,000 with Retained Earning of ($1,569,110) in the 6th quarter which is more than sufficient for “The Bike” profit investment return for the investors. In the 5th quarter “The Bike” had a (66.42)% ratio comparable to current industry average of 2.21, high 34.03, & low (66.42) comparison to competitors “The Bike” had a lower Return of (66.42)% to competitors which indicates that most seasoned investors would choose to invest in a company with higher Return on Paid-In Capital compared to a company with lower ratios; therefore with corresponding Income Statement data of Net Income $1,329,391 and Balance Sheet Data of Common Stock $5,000,000 with Retained Earning of ($2,998,367) in the 5th quarter which was insufficient for “The Bike” profit investment return for the investors. In the 4th quarter “The Bike” had a (32.42)% ratio comparable to current industry average of (66.12), high (32.42), & low (96.86) comparison to competitors “The Bike” had a lower Return of approximately 2 times industry comparison which indicates that most seasoned investors would choose to invest in a company with higher Return on Paid-In Capital compared to a company with lower ratios; therefore with corresponding Income Statement data of Net Income ($1,079,960) and Balance Sheet Data of Common Stock $5,000,000 with Retained Earning of ($1,668,975) in the 4th quarter which is insufficient for “The Bike” profit investment return for the investors. The data analysis shows that “The Bike” during the 6th quarter financial performance was generating profits from capital a larger chunk of profits can be invested back into the company for the benefit of shareholders also indicating achieving higher profits than its competitors an over achiever in the marketplace.

## Financial Ratio Analysis

A ratio is a comparison of two similar quantities. Financial ratios can be used to judge the performance of the company over time based on

several different factors (e.g., leverage, efficiency, productivity, and liquidity).

This topic addresses the following competency:

* **Competency 3015.1.3: Valuation Skills**  
  The graduate applies valuation skills to evaluate capital investment projects and the overall value of a firm.

This topic highlights the following objectives:

* Explain the issues that arise when using accounting information for financial analysis.
* Calculate the key ratios related to leverage, efficiency, productivity, and liquidity.
* Explain how returns are bottom-line measures to assess a company’s performance and can be used to compare trends among similar companies.
* Describe when financial statement entries must follow given guidelines and when judgment can be used.