# Solvency Ratio Analysis in Portfolio Galaxies

Graded Assignment Five (GA 5)

#### **Solvency Ratio Analysis**

For your family, or galaxy of companies, please augment your existing analyses with a new ratio, the solvency ratio. There are six common ways to assess the ability of a corporation to support its operations, while repaying debt obligations. For this assignment, your team will apply one of these common ratios to each company, to arrive at a percentage value. These ratios are established per Chartered Financial Analyst Curriculum, published by CFA Institute, 2019.

### **Composite Investment Grading**

Because your team possesses activity, liquidity and solvency metrics on each company, rank the galaxy (or portfolio) based on an average of these three metrics. Since each metric is expressed as a percent, or floating point number, you may average the three metrics, to arrive at a weighted, single number. The new weighted average can represent a composite investment grading, when compared to all your companies. Hence, we ask that your team rank the galaxy in terms of their composite averaged quality.

# **Your Team's Investigation into Managerial Practices**

For the top performing firm or firms, investigate why they are such high performers, in these three categories. Specifically, what information systems do they use, to maintain such high performance? After ranking the galaxy by ratio, study how your top performers leverage information technology, to coordinate and control operations. Discuss what you learned. It would be best for each team member to take one of the top four or five companies (depending on your group size), and study their use of technologies. Comment using several pages, if needed.

# Notes on the process

Definitions of Commonly Used Solvency Ratios

Solvency Ratio	Numerator	Denominator
Debt-to-assets	Total debt	Total assets
Debt-to-capital	Total debt	Total debt + Total shareholders' equity
Debt to equity	Total debt	Total shareholders' equity
Financial leverage	Average total assets	Average total equity
Interest coverage	EBIT	Interest payments

Fixed charge coverage	EBIT + Lease payments	Interest payments + Lease
		payments

- 1. EBIT, defined. Earnings before taxes and interest payments, where earnings are net, minus cost of good sold, or other expression of operations. When using the Interest coverage ratio, we compare the net earnings before the obligations of debt payments. Then, we can analyze the rate of debt consumed by an entity, relative to its profit.
- 2. Not all companies operate with similar cost structures. For example, some corporations buy and hold real estate, while others depend on lease arrangements. Hence, the Fixed Charge Coverage ratio tends to apply to lease-holding operations, where retail, and rented space (accounting firms, other white collar service industries) are preferred.
- 3. Utilize the SEC 10Q, or other financial statements, before choosing a solvency ratio. Since under FASB/GAAP different accounting practices are required for different industries, their respective 10Q will differ, even within your portfolio galaxy. Since in 3100 we accommodate different entity types into the same portfolio, apply different solvency ratios, prudently, according to line items the entity declares on their 10Q. There will also likely be a separate worksheet available on EDGAR, which discusses debt, in useful terms.
- 4. Submit your deliverable by thursday of the following week. Write the full name of each team member on the file name of the document, when submitting to the dropbox.
- 5. Write GA 5 in the title of the filename, with your team mates' names.