DREXEL UNIVERSITY
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FIN 301 Introduction to Finance

Final Project

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1. Obtaining information and understanding the firm

- **What are some of the most common filings?**
  - List three, and write a sentence or two describing when they are filed / what information they contain
    1) 10-K: This is a company's annual report submitted to the Securities and Exchange Commission (SEC). It includes audited financial statements, management's discussion, and analysis of the financial status, market risks, and other pertinent information.
    2) 10-Q: This is a quarterly report filed with the SEC by firms. It includes unaudited financial accounts and gives a glimpse of a company's financial performance and operations for the quarter.
    3) 8-K: This is a report that firms file in order to reveal major events or transactions that are essential to shareholders. It contains information such as acquisitions, mergers, management changes, financial performance, and other significant events.
- **We will focus on the 10-K: The annual statement. This filing contains the important financial statements of a firm.**
  - In accounting, you covered several types of financial statements. What are the “Big 3” financial statements?
    1) Income statement: also known as the profit and loss statement, details a company's sales, costs, and net gain or loss during a given time period.
    2) Balance sheet: shows a company's assets, liabilities, and shareholder’s equity at a certain point in time. It gives an overview of the company's financial situation.
    3) Cash Flow Statement: The cash flow statement depicts the cash and cash equivalent inflows and outflows from operating, investing, and financing operations. It aids in determining a company's ability to generate cash and liquidity.
- **Briefly explain what industry Walmart is in and show where in the 10-K you got this information from**
  Walmart operates in the retail industry, specifically in the general merchandise and grocery sectors. Typically, the 10-K filing contains information on the company's business operations, such as its industry segment, competitors, and market outlook. This information is often found in the 10-K's "Business" section.
- Compute the following ratios for 2023 and explain what they mean (is larger better?). Do not hardcode!
  (See Excel sheet)

2. Interpretation

a. **Explain what the change in Net Working Capital is. If Net Working Capital increased, do you now have more or less cash? GOOGLE THIS to double-check your answer.**
   The change in Net Working Capital represents the difference between the current year's

NWC and the previous year's NWC. If NWC increased, it means that the company has allocated more funds to its working capital components, such as accounts receivable, inventory, and accounts payable. This increase in NWC does not necessarily indicate a direct impact on cash. Changes in NWC can affect cash flow indirectly by influencing the timing of cash inflows and outflows related to working capital activities.

b. **Calculate the Equity Value/Share: Equity value divided by the number of common shares (from stockholders equity statement: highlighted)**
   Equity Value/Share = 83754/2693 = 31.10

c. **Would you currently buy this stock?**
   I would still buy this stock considering the overall analysis of it and its market perspective.

d. **Assuming the stock is currently priced correctly, what is the implied terminal growth rate g?**
   g = Discount Rate - (Dividend per Share / Equity Value per Share), considering the equity value per share is $31.10 and the discount rate is 5.29%, annual dividend per share is about $2.28. We can get that the implied g is about -2.05%, considering the dividend per share, equity value per share and discount rate. It is not reasonable from my perspective.

3. Sensitivity / Scenario Analysis

a. **What happens to the value per share if the wacc changes? Use data tables (under what-if analysis) and conditional formatting to make it look nice.**
   To calculate the equity value per share using the WACC, we can use the Dividend Discount Model. The DDM calculates the present value of all future dividends and assumes that the value of a stock is equal to the sum of its future dividend payments.
   Equity Value per Share = Dividend per Share / (WACC - Dividend Growth Rate)
   According to Walmart, the yearly Walmart dividend per share is about $2.28 each year.
   Not sure what to do, the dividend growth rate is not provided from the table data.

b. **Imagine the Federal Reserve Bank raises interest rates, thereby increasing cost of debt and risk-free rate. Quantitatively show and qualitatively explain how this would affect your valuation. Assume everything else stays constant.**

Risk-free rate	CAPM
3.75%	0.06598
4.00%	0.06680
4.25%	0.06763
4.50%	0.06845
4.75%	0.06928
5.00%	0.07010
5.25%	0.07093
5.50%	0.07175
5.75%	0.07258
6.00%	0.07340

CAPM is often used as a component of the discounted cash flow (DCF) analysis. DCF analysis is a valuation method that estimates the present value of a company's future cash flows. CAPM is used to determine the appropriate discount rate to apply to those cash flows, reflecting the risk associated with the company's stock.

4. Alternative Methods

a. If instead of calculating the Terminal Value as a growing perpetuity you would have used the EV/EBIT multiple, what would you have used as a multiple? What is the Terminal Value if you use this multiple instead of the perpetuity?

EV/EBIT = 12.82 for Retail (Grocery and Food) company.

TV = Financial Metric * Trading Multiple = EBIT * 12.82 = 20428 * 12.82 = 261886.96

b. If you wanted to use the "Comparable Analysis" method, what would you do? Name two potential companies you could use as "comparables"

1. Look for companies that operate in a similar industry, have similar business structures, and have similar market capitalizations. **Target and Costco** are two potential similar firms for Walmart because they are both big participants in the retail industry.
2. Collect financial information: Gather financial information for the target company (Walmart) and any comparable companies that have been found. Revenue, EBITDA, net income, and growth rates are important financial measures to analyze.
3. Calculate valuation multiples: Using the financial data, compute valuation multiples. Price/Earnings (P/E), Price/Sales (P/S), and Enterprise Value/EBITDA (EV/EBITDA).
4. Compare multiples: Compare the target company's value multiples to those of comparable companies. Based on these comparisons, determine if the target company is overvalued or undervalued.
5. Determine the value range: Using the range of multiples seen in comparable companies, apply the applicable multiples to the target company's financial indicators to determine its valuation range.

c. What does "Garbage In = Garbage Out" mean? What are your thoughts on the assumptions made in this assignment?

The term "Garbage In = Garbage Out" alludes to the idea that if you input faulty or untrustworthy data or make flawed assumptions into a system or analysis, the output or results will be flawed or untrustworthy as well. In other words, the output quality is precisely proportional to the input quality.

For this assignment, I think the assumption made is all based on the four financial tables of Walmart. All the following calculations are based on the original data from the financial report. If the data is even slightly incorrect at the beginning, no matter how precise the following calculation is, the final calculation results may vary a lot and hence lost any reality meanings.