FINA2222 Corporate Financial Policy Semester 2, 2024
Group Assignment
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VOLKSWAGEN

 

This case study is based on a real company, Volkswagen AG (VOWG) and is set on 8 January 2024. VOWG is a Germany-based company, which manufactures and sells vehicles. The Group consists of two divisions: the Automotive Division and the Financial Services Division. The Automotive Division comprises the Passenger Cars, Commercial Vehicles and Power Engineering business areas. This division focuses on the development of vehicles, engines and vehicle software, the production and sale of passenger cars, light commercial vehicles, trucks, buses, and motorcycles, as well as businesses for genuine parts, large-bore diesel engines, turbomachinery, and propulsion components. The Financial Services Division focuses on dealer and customer financing, leasing, direct banking, and insurance activities, fleet management and mobility services. Its brand portfolio includes Volkswagen, Audi, SEAT, SKODA, Bentley, Lamborghini, Porsche, Ducati, Volkswagen Commercial Vehicles, Scania, and MAN.

As shown in Figure 1, in January 2023, VOWG had a favourable outlook for the year, but this effect was only temporary. Financial market participants were sceptical about the high level of capital required for the company's transformation amidst intensifying competition in the automotive sector. For instance, competitors were cutting prices, especially on electric vehicles, and VOWG’s market share in China was declining. Investors were also expecting falling margins in the automotive industry and lower demand for electric vehicles, leading to stiffer competition. Consequently, the 2023 year-end closing price was down 19.8% compared with the prior year's figure.

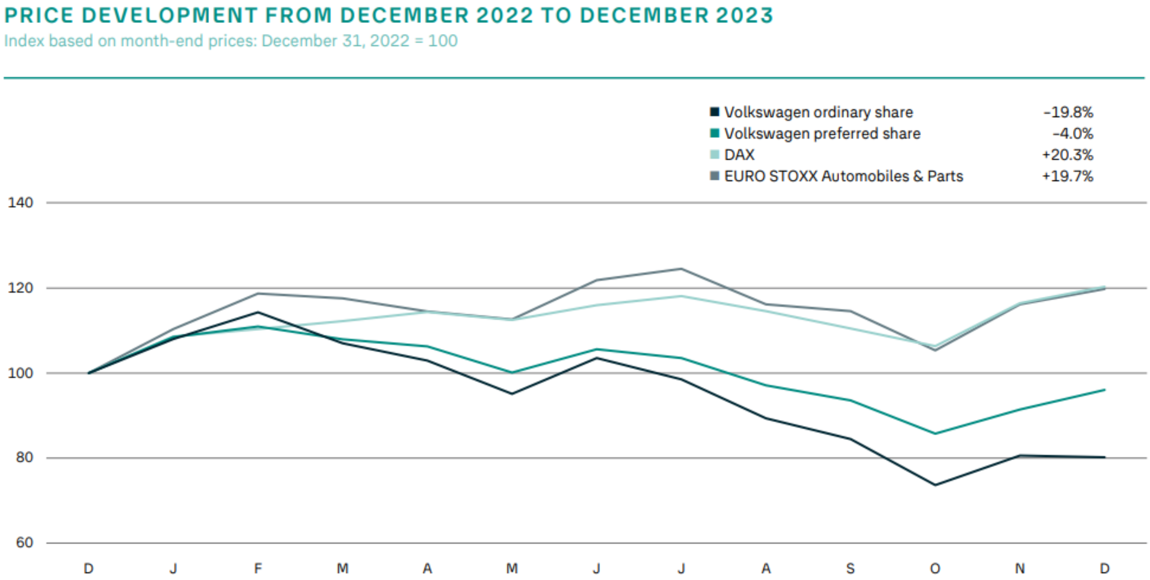

Figure 1

As the CFO of VOWG, during investor conferences in December 2023, you overheard discussions among institutional investors and analysts about other companies utilizing leveraged recapitalization to boost firm value. Additionally, it is common to observe spikes in share prices when a share repurchase is announced. In an effort to improve share valuation, you are considering proposing a leveraged recapitalization to the CEO of VOWG.

On 8 January 2024, you noted that VOWG's closing share price is $121.80 and the number of shares outstanding is 501,295,263.[1] Taking into consideration current capital market conditions, you decided to focus on the assumption that VOWG could borrow $7 billion at S&P's credit rating of BBB+ with a yield of 4.3% in the current market. Under the proposed leveraged recapitalization, VOWG would borrow $7 billion and use it either to pay an equivalent dividend or to repurchase an equivalent value of shares. You knew that this combination of actions could affect the firm's share value, cost of capital, EPS, and some other potential areas. Assume an overall average tax rate of 30%.

Question 1: Impact of leverage on valuation and share price

To test the valuation effect of leverage, you assume that VOWG could borrow debt at a pre-tax cost of debt of 4.30% based on the firm's BBB+ credit rating, and that the aggregate amount of debt will remain constant in perpetuity. Also, you assume that the proceeds of the loan would be used to repurchase shares or be paid as a special dividend to shareholders.

Does it matter to firm valuation and share price whether the borrowing is spent on (1) repurchasing shares, or (2) paying a lump sum of special dividend?

Tips:
1. Complete table in Excel spreadsheet Q1 and paste the completed table in your pdf.
2. Show step-by-step workings in your pdf. (10 marks)
3. Explain your final answer succinctly. (5 marks)

[1] The number of shares outstanding is sourced from https://www.volkswagen-group.com/en/fact-sheet-16024 .

Question 2: Impact of leverage on the cost of capital (WACC)

How does additional debt affect the cost of capital (WACC), in each scenario of debt being used to repurchase shares and to pay a special dividend?

Tips:
1. Complete the table in Excel spreadsheet Q2 and paste the completed table in your pdf.
2. Show step-by-step workings in your pdf. (10 marks)
3. Explain your final answer succinctly. (5 marks)

Question 3: EPS vs EBIT sensitivity

You need to use sensitivity analysis to examine the effect on earnings per share (EPS) of issuing $7000 million of new debt and using the proceeds to repurchase existing shares or pay a special dividend. You predict that the "most likely" EBIT will likely grow by 17% from the previous year (i.e., EBIT as at 31 Dec 2023). The worst case is where EBIT drops by 70% from this "most likely" case and the best case is where EBIT is higher than the "most likely" level by 50%. What can you conclude from this analysis?

Tips:

1. Complete the table in Excel spreadsheet Q3 and paste the completed table in your pdf.
2. Show step-by-step workings in your pdf. (8 marks)
3. Paste the graph in your pdf (3 marks)
4. Explain your final answer succinctly. (4 marks)

Question 4: Other effects (15 marks)

What are other effects of the company issuing debt and share repurchases? Limit to 3 effects (other than tax shield) but aim for in-depth discussion. Note that your discussion needs to be specific to VOWG's position in the current market. Using evidence-based arguments, you need to evaluate whether these effects are significant or insignificant, which in turn guide your judgement whether to go ahead with the debt issuance or not. Do not write more than 600 words.

Tips: This is a research-based, open-ended question. Support your arguments using relevant theories that you have learned in Corporate Finance ***and*** *supplement with reliable sources such as additional data provided in the Excel spreadsheet, financial news sources, annual report, and/or research articles from Google Scholar with appropriate referencing. Specifically, if your answers only paraphrase theories without incorporating VOWG's position and supporting evidence along with referencing, no marks will be awarded. While no calculation is required, you can still provide numerical support for some of your arguments.*

IMPORTANT TIPS

While figures given in financial statements are in millions, for simplicity, numbers calculated in the questions should be in millions, except for percentages and share prices, where 2 decimal places are needed.

Use MS Excel formula for calculations in the tables as Excel gives accurate numbers. When showing workings in MS Word, for simplicity, you can round the numbers (in million dollars) to integer, i.e., zero decimal place.

INSTRUCTIONS

1. SUBMIT PDF DOCUMENT ONLY. Excel files are not acceptable.
2. PAGE LIMIT: 4 PAGES (excluding appendices or references).
3. The attached MS Excel spreadsheet tables must be completed and pasted into your assignment in the Appendix section.
4. On the front page of your assignment, include your group number, each contributing members' names, and their student ID.
5. Fill out the Meeting Minutes Sheet after each meeting. The template is available for download on LMS. You can include them in the Appendix section.
6. Complete the assignment in MS Word using size 11 pt. Times New Roman font and 1.5 line spacing. Then convert it into PDF for submission.
7. For each question, use formula to complete Excel tables, and CLEARLY SHOW THE BASIS OF YOUR CALCULATIONS in the Word document, so that partial credit can be awarded where possible.
8. Use Firefox or Chrome and avoid using Internet Explorer when you upload your assignment. Upload it onto LMS from your hard drive, not Google Drive.

SPARKPLUS PEER ASSESSMENT

1. We use SPARKPLUS as a peer assessment mechanism to help track individual contribution within a team. It is compulsory for this unit.
2. In SPARKPLUS, each student is required to provide anonymous rating and feedback to the other team members in their group.
3. To register for SPARKPLUS – go to https://uwa.sparkplus.com.au , or use the SPARKPLUS link provided on LMS (left-hand-side menu).
4. SPARKPLUS will be opened twice, complete the task each time by its due date. Look out for the reminders on LMS for the opening and closing times, respectively.

Failing to complete the second SPARK assessment will result in the group score being multiplied by 0.8 to obtain your individual mark (unless your SPARK assessment is lower).