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Impact of stock valuation on financial performance a review of Carrefour

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ABSTRACT

This study compares market and predicted prices in order to assess the target price of Carrefour using the discount cash flow approach and valuation techniques. Additionally, recommendations are made based on the findings of this study. This study looks at a five-year forecast for future cash flow to the company using past data. But cash flows were discounted back using WACC to 2019 in order to determine the firm's net present value. In spite of its modest development, Carrefour is still unable to compete on the basis of market value, as this article demonstrates. Carrefour needs to down their costs further more. In accordance with CAPM guidelines, the discount rate is projected to be -5.90%, whereas the computed target price is -3.77%, indicating a market price of 15.93%. 2019 is expected to be greater than 2020, with Carrefour's market price reaching 13.76% on June 30, 2020.

Keywords: Earnings before interest and tax; Gross profit; Other operating expenses

Introduction

One of the biggest grocery chains in the world and one of the most well-known merchants is Carrefour. Furthermore, Carrefour ranks second in terms of revenue and sales among retailing groups, trailing only Wal-Mart (Carrefour, 2020). But, Carrefour is a global company that provides the general public with a wide range of services and goods in addition to apparel, food, ATM banking, and other goods and services (Grădinaru & Toma, 2015). The Carrefour company employs a variety of strategies to streamline business processes and maintain its position as a leader in the retail sector. As of June 22, 2021(Yahoo Finance, 2021).

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When the Carrefour group opened its doors in France in 1963, it quickly expanded to become a major department store and supermarket by providing a wide range of items. The business expanded over time in response to shifting consumer demands, and in 1970 it was floated on the Paris Stock Exchange. The Carrefour Group also has a lot of duties to its clients, including providing them with the highest-quality products and meeting their preferences for products on time.

Carrefour rises to the position of the second-largest retail company in the world market. The discounted cash flow methodology serves as the foundation for the evaluation method used in this study. First, a five-year prognosis for Carrefour's free cash flow availability and terminal value is provided. In addition, this study used the cost of capital to discount back the present value of future cash flows. For long-term forecasting, sales growth and the ratio of sales growth to other factors are based on past trends.

Future cash flows are forecasted using historical growth rates and the assumption that the company's capital structure and investment policies won't change. Thus, the discount rate can be thought of as the average weighted cost of debt and equity. The cost of debt and equity, as determined by credit rating agencies' rates, is supported by the application of CAPM. The present value of the cash flows project is also included in the company's enterprise value.

Literature Review

This research makes use of business appraisal techniques that are derived based on the value and business analysis authored by Krishna G., Paul M., & Erik (2013) as well as book of corporate finance (Hillier, 2019). Stock valuation is done to determine the company's stock worth by comparing industry facts and figures. Stock valuation serves to lower the likelihood of loss while enabling proper stock management by displaying the amount of money spent in goods and products (Babington, 2020). Although there are other approaches that have been covered in earlier research, cash flow is one of the finest techniques for stock valuation (Benjamin & Michael, 2018).

Additionally, data from the Bloomberg terminal is used to anticipate future cash flow (Bloomberg, 2021). The Bloomberg terminal provides standardized statements for industry and company financial data benchmark comparison. As such, the discount cash flow method is a valuable technique for valuation; in contrast, this method makes an estimate of the investment's worth based on its anticipated future cash flows. The DCF analysis reveals how much a specific quantity of money will earn in the future, as well as the figures for today's worth and future predicted value (Fernandez, 2020).

Nevertheless, stock price information and current price movements were obtained from Yahoo Finance (Yahoo Finance, 2021). The International Monetary Fund is the source of data for macroeconomic metrics such as GDP and inflation (IMF, 2021). Reports state that the Bloomberg terminal offers expert

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data (Grădinaru & Toma, 2015). Additionally, several media sources, such as the newspapers published by Financial Times, Consumer News, and Business Channel, are cited when discussing Carrefour's past performance, financial statistics, or background history. These sources offer concise remarks regarding Carrefour's pricing and strategy. Thus, the Investment Philosophies reference was used in his study's financial ratio computation (Aswath, 2012). Finally, the book Introductory Econometrics for Finance states that regression analysis methods.

Data

The discounted cash flow is used to calculate Carrefour's fair value method is employed in the study. Meanwhile, Discounting is used to calculate Carrefour's present value predicted future cash flows to the current year 2020 (Krishna G., Paul M, & Erik, 2013). Data on Carrefour's valuation was collected for this study during a five-year period, beginning in 2016 and ending in 2020. Carrefour's prior financial statements were utilized for analysis and projection. The variables that were employed in this study are shown and described in this part, together with information on their financial basis and measurement methodology.

Free cash flow to firm

The amount that remains after depreciation costs, working capital, investments, and taxes is known as free cash flow. In essence, FCFF measures a company's profitability after deducting all costs. Analyzing the company's financial situation is beneficial. Furthermore, free cash flow is regarded as the key metric for determining the company's stock value (Fcff, 2021). The estimated value of future cash flow is represented by the price of the stock. However, corporations permit investors to evaluate the FCFF for correct stock valuation (Xin, Sun, & Xu, 2016). If an investor wants to invest, they should first verify FCFF (CFI, 2020). The study's valuation technique is based on the company's cash flow from operations and debt repayment. As a result, free cash flow is accessible.

Earnings before interest and debt

Profits before interest and debts are defined as earnings before taxes, depreciation, and other expenses. It serves as a gauge for the overall financial and operational performance of the business. Additionally, it is regarded as an additional use for net income under certain conditions. Another measure of a company's success is its earnings before interest and taxes (Torghabeha, Parsian, & Koloukhi, 2014). Discount cash flow approach, however, is used to generate value from operational revenue rather than investment income. In order to develop this model, earnings before interest and debt are thus evaluated. These earnings are produced by the sales of goods and services, from which the cost of goods sold as well as expenses are subtracted. These things are extracted from Carrefour's income statement. In addition, it can be computed by deducting revenue from expenses, but not tax or interest. EBIT is a metric used to

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study how well a company's core operations are carried out generally, independent of the capital structure prices that affect turnover. Investors can assess a company's health and ability to repay debt by looking at its activities in this way.

Capital expenditures

A capital expenditure is the amount paid to purchase a long-term, physical fixed asset for use in a firm. Capex is the payment for long-term assets, whether it is made in cash or on credit. These costs are the investments that businesses make in order to grow. Furthermore, businesses must invest in machinery, various tools, property, plants, and technology in order to expand and stay in business. It significantly affects the company's cash flow. Additionally, capital expenditures are listed under the company's investing operations in the cash flow statement (Jacob, Saman, & Bruno, 2018). Additionally, it functions as a historical discrete time period of cash flow, with the goal of normalizing expenses to assist in the company's planning for the future.

Effective tax rate

The tax rate a firm must pay on its profits is represented by this rate. Moreover. The balance sheet of the corporation displays non-cash accounting terms and items, such as effective tax expense. A company is legally required to pay corporate income tax. However, it determines the percentage of taxes that a business or an individual must pay. As a result, it displays their average salary, this efficient tax conceals all taxes, tax expenses, and aids in calculating the annual pretax income ratio rather than adding the individual items. The 2018 U.K. company tax laws permitted many multinational corporations to use their overseas profits to fund their operations. The chancellor of the UK lowered company taxes to a flat 19% and also lowered the foreign earnings tax to 17% (CNBC, 2018).

Change in net working capital

A shift in working capital denotes an adjustment to the working capital amount from one accounting period to the next. Additionally, administrations always seek to reduce working capital fluctuations and the resulting need for additional funding. Nonetheless, a component of accounting that outlines a company's responsibilities for managing its operations is the change in working capital (Afrifa & Tingban, 2018). trade receivables and adjustments to inventory retained as a result of a shift in net working capital. Furthermore, the calculation of change in working capital verifies that the business maintains sufficient operating capital throughout each accounting period to ensure that there is no longer a shortage of price range or that the price range is not left inactive in the future. There may be several approaches used for this objective depending on the business and the analysts (CFI, 2020).

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Weighted average cost of capital

The Weighted Average Cost of Capital (WACC) indicates the cost of capital for a company across all bases, which include both stock and debt. When determining the current cost of a corporation or business, financial forecasters frequently utilize WACC as a discount in economic modeling (Dobromir Dikov, 2020). As a result, cost of capital shows the company's current value, while investors pay to take on risk and obtain the lowest rate of return in order to increase return (Krishna G., Paul M, & Erik, 2013). Furthermore, WACC is regarded as a crucial component of discounted cash flow, as it explains key ideas concerning business investment and finance in particular. WACC is now determined by the external market rather than by the company's management. It is the lowest rate of return that a business must achieve on its asset base in order to pay its creditors, owners, and other capital sources, or to invest its money elsewhere (Comeig, 2020). As a result, it is the component of the market's total equity, after-tax cost of debt, and total debt value.

Cost of Equity

The projected beta return link between the equity cost and its market was quantified and reported using the model for valuing capital assets. Businesses frequently utilize needed rate of return in capital budgeting. Furthermore, a graph of market securities illustrates the cost of equity (Cao, Myers, Myers, & C.Omer, 2015). Additionally, it expresses the market demand for the company's assets and risk-taking capability. Therefore, the capitalization of dividends and capital asset pricing model, or CAPM for short, is the cost of equity. The expected rate of return is composed of the market risk premium rate and beta of equity. Additionally, the typical yield on UK government bonds is calculated over a ten-year period.

Additionally, governmental securities measure and correspond to a 10-year maturity timeframe. According to Krishna G., Paul M., and Erik (2013), investors who own portfolios with a high market risk and a risk-free return rate are required to pay a market premium of risk. Nonetheless, the market risk and macroeconomic variables that affect each country vary. Therefore, specialists in UK finance and company valuation advise a 5.5 percent market risk premium (Harrington, 2014). Additionally, equity beta, often known as systematic risk β_e, specifies how market risk affects return on equity (Hillier, 2019). The traded Carrefour equities are selected over benchmarks such as the UK S&P 500 index and the Wal-Mart indexes. The portfolio shows the market index on which the corporation traded its equities. It assists investors in identifying the relationship between market risks and comparing Carrefour's technological offerings.

Cost of Debt

Debt owed by businesses, such as bonds and loans, is referred to as cost of debt. As a result, the discount cash flow model entirely depends on the cost of debt, which is determined after taxes and is taken into account when deducting interest expenses from taxes (Shin & Woo, 2017). The primary distinction

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between the cost of debt and the cost after taxes is hence the deductible tax. In the meantime, cost of debt is a crucial component of a company's capital structure, along with cost of equity. It also aids in determining the responsibility that is covered by a company's paid debts. Thus, the cost of debt is equal to the sum of the risk-free rate and the risk after taxes (Chen & King, 2014).

Nonetheless, credit default refers to long-term bonds that corporations issue, contingent on their capacity to repay their debts (Fernandez, 2020). Furthermore, credit rating organizations are able to provide a company's creditworthiness throughout the rest of its life. Investors must make additional payments to some extent in order to assume the default risk. However, a high rate of return on investment may reduce the cost of debt, and interest rates are typically closer to risk-free returns. Long-term credit default bonds issued by Carrefour are rated BAA1 by Moody's Investor Service (Bloomberg, 2021). The BAA1 unsecured medium rating scheme, according to Moody's (Moody's, 2020).

Perpetuity Growth Rate

In essence, the perpetuity rate of growth is the growth rate that separates the historical GDP growth rate from the historical inflation rate. Furthermore, this approach recognizes the continuous creation of free cash flow for businesses at a normalized perpetuity (Damodaran, 2012). The perpetual growth rate shows the rate at which the FCFF grows to its terminal value at a constant rate. It is also a different kind of terminal value (WSO, 2009). Assuming that economies experience strong perpetuity rate growth and relatively flat cash flow growth. The US growth rate is being used as a reference. As a result, the IMF uses the perpetuity rate under the GDP assumption. Global estimates indicate that the real GDP growth rate in 2024 will be unpredictable, but the perpetuity projected growth rate of FCFF predicts the same stability of trend.

CONCLUSION

The initial study indicates that Carrefour's average gross margin with net income margin of remains high despite a deceleration in revenue growth. Carrefour furthermore has a quick ratio of 1.8 and a current ratio of 3.3 on the liquidity side. Modernity and increased investment in innovations are necessary to compete in this global marketplace. Although Carrefour consistently tries to perform well and prepares for problems, they are now not able to capitalize on the market and are not performing up to their expectations. Furthermore, Carrefour must cut expenses. This analysis, which used historical data from 2016 to 2020, explains Carrefour's current and potential selling positions.

Discount cash flow values, Carrefour short- and long-term loans, and the inclusion of minority interest have been used to compute the target value for the next five years. Carrefour has an upside potential of -19.60%, based on a DCF model target price of -3.6%. A perpetual growth rate of 1.80% and a projected discount rate of -5.90% have been determined. The target price is shown to be significantly sensitive on the

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+1.00% assumption based on the sensitivity of Wacc computed. Moreover, two scenarios computed in section 5's first demonstrate a +1% increase in revenue and COGs on the influence of the target price through a graph that indicates that, in the event that COGS growth grows +1%, the revenue side would decline by -1% more quickly than anticipated. Right now, low buy tactics are advised for investors in this paper.

REFERENCES

Afrifa, G., & Tingban, I. (2018). Working capital management, cash flow and SMEs' performance. International Journal of Banking, Accounting and Finance, 19-43.

Aswath, D. (2012). *Investment valuation: Tools and techniques for determining the value of any asset.* Vol. 666 John Wiley & Sons.

Babington. (2020). *Stock valuation methods in Accounting: FIFO, LIFO & AVCO*. Retrieved from https://babington.co.uk/blog/career-resources/stock-valuation-methods-accounting/

Benjamin, C., & Michael, N. (2018). Corporate Valuation of SaaS Companies–A Case Study of Salesforce. com. In 11th Annual Conference of the EuroMed Academy of Business. *11th Annual Conference of the EuroMed Academy of Business*, 357-371.

Bernard Marr & Co. (2020). *Revenue Growth Rate*. Retrieved from https://www.bernardmarr.com/default.asp?contentID=776

Bloomberg. (2021). *Bloomberg Philanthropies*. Retrieved from Bloomberg Philanthropies: https://annualreport.bloomberg.org/bloomberg-lp/

Businesswire. (2021). *Businesswire:A bershire hathaway company*. Retrieved from https://www.businesswire.com/news/home/20210505006108/en/Carrefour%C2%A0Launch-of-a-Share-Buyback-Program-for-%E2%82%AC500-Million

Cao, Y., Myers, J., Myers, L., & C.Omer, T. (2015). Company reputation and the cost of equity capital. *Review of Accounting Studies*, 42-81, 20(1).

Carrefour. (2020). *Company profile: Carrefour.* Carrefoure Group: http://mis-carrefour.blogspot.com/p/introduction.html.

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ISSN: 2791-0695

Carrefour. (2020). *Company profile: Carrefour.* Carrefoure Group.CFI. (2020). *CFI: Future Internet Technologies*. Retrieved from Proceedings of the 7th International Conference on Future Internet Technologies: https://dl.acm.org/doi/proceedings/10.1145/2377310

CFI. (2020). *Corporate Finance Institute*. Retrieved from https://corporatefinanceinstitute.com/?gclid=CjwKCAjwoNuGBhA8EiwAFxomA308biXuDekW0GhLkJfreBl88jUzbzDuT5Vu-7ekE2ypWzjZM3tloxoCS-gQAvD_BwE

Chen, J., & King, T. (2014). Corporate hedging and the cost of debt. *Journal of Corporate Finance*, 29, 221-245.

CNBC. (2018). *Consumer News and Business Channel* . Retrieved from https://www.cnbc.com/2018/10/22/trump-repeats-dubious-pledge-to-introduce-middle-class-tax-cut-before-midterms.html

Comeig , R. (2020). Weighted Average Cost of Capital. Unit 6-6.2.

Damodaran, A. (2012). *Investment valuation: Tools and techniques for determining the value of any asset.* John Wiley & Sons.

Dobromir Dikov. (2020). *Magnimetrics*. Retrieved from https://medium.com/magnimetrics/understanding-the-weighted-average-cost-of-capital-wacc-948182d97e6

Edriaan Koening. (2020). *Capital Expenditures to Depreciation Ratio*. Retrieved from Bizfluent: https://bizfluent.com/info-8609870-capital-expenditures-depreciation-ratio.html

Fcff. (2021). *Investopedia*. Retrieved from https://www.investopedia.com/terms/f/freecashflowfirm.asp

Fernandez, P. (2020). Valuing Companies by Cash Flow Discounting: Only APV Does Not Require Iteration. *SSRN*, 18.

Forensic Strategic Sloutions. (2020). *FFS: Forensic Strategic Solutions*. Retrieved from https://www.forensicstrategic.com/newsroom/

Grădinaru, C., & Toma, S.-G. (2015). Wal-Mart: Made in America. *University of Bucharest*.

Harrington, J. (2014). Using the Duff & Phelps Risk Premium Report Data. *Cost of Capital*, 471-498.

Hillier, D. (2019). *Corporate Finance.* European Edition. McGraw Hill.

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IMF. (2021). *International Monetary Fund*. Retrieved from International Monetary Fund: https://www.imf.org/en/Home

Jacob, R., Saman, W., & Bruno, F. (2018). Variables influencing allocation of capital expenditure in Indonesia. In IOP Conference Series: Earth and Environmental Science. *IOP Publishing*, 126.

Jeffrey M Wooldridge . (2015). *Introductory econometrics: A modern approach.* . Cengage learning.

Kalsie, A., & Arora, A. (2017). Comparison of Price Multiples using DDM, DCF and Current Market Multiples of FMCG Companies. *Sumedha Journal of Management*, 13-36.

Kozlovska, I. (2015). The impact of long-lived non-financial assets depreciation/amortization method on financial statements. *Copernican Journal of Finance & Accounting*, 91-108.

Krishna G., P., Paul M, H., & Erik, P. (2013). Business analysis and valuation: IFRS edition. *Cengage learning*.

Moody's. (2020). *Moody's Investors Service*. Retrieved from Moody's Investors Service: https://www.moodys.com/research/Moodys-affirms-Carrefours-ratings-outlook-changed-to-stable--PR_445659

Pinto, J. (2020). *Equity asset valuation.* John Wiley & Sons.

Shin, H., & Woo, Y. (2017). The effect of tax avoidance on cost of debt capital: Evidence from Korea. *South African Journal of Business Management*, 48(4), 83-89.

Street of walls. (2020). *Discounted cash flow analysis*. Retrieved from Discounted cash flow analysis: https://www.streetofwalls.com/finance-training-courses/investment-banking-technical-training/discounted-cash-flow-analysis/

Torghabeha, M. R., Parsian, D., & Koloukhi, A. (2014). Karimi Torghabeha, M. R., Parsian, D., & Shams Koloukhi, A. (2014). A study on relationship between earnings before tax, interest and operational cash flows with stockholders' equity. *Management Science Letters*, 1699-1706.

WSO. (2009). *DCF Perpetuity Growth Rate*. Retrieved from https://www.wallstreetoasis.com/forums/dcf-perpetuity-growth-rate

Xin, C., Sun, Y., & Xu, X. (2016). Free cash flow, over-investment and corporate governance in China. *Pacific-Basin Finance Journal*, 81-103.

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Yahoo Finance. (2021). *Yahoo Finance*. Retrieved from https://finance.yahoo.com/quote/ca.pa/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAANuzMUJ2QKd60L4JzCagoXM-4Qkdrj6wY-s4G8NAGx226RWt9ZvlNPNk9hhiCmig4jFTWu8sO15zEcIosjTMVbQu8Ogxyq1ttPYfebdDiNVi6xPqzavV8nFA8praxeI-KZTstmN

Zhang, C., & Jun, D. (2018). The Impact of DisruptiveTechnologies on Accounting and Auditing Education: How Should the Profession Adapt? *The CPA Journal*, 88(9), 20-26.