A FINANCIAL ANALYSIS OF ELECTRONIC ARTS (EA)

I. Business Analysis

A. History

Electronic Arts (EA) is an American developer and manufacturer of electronic games for personal computers and video game consoles such as PlayStation, Xbox, and Nintendo. The company was established in 1982 by William M. Hawkins, a former employee of Apple Inc., who left the company to start "Amazin' Software" which was later rebranded as Electronic Arts. The company went public in 1989 and is currently headquartered in Redwood City, CA.

B. Current Operations

The Company's portfolio includes popular IPS such as Battlefield, Need for Speed, Apex Legends, The Sims, Madden, FIFA, and many others. Additionally, the company developed and operates its gaming platform named Origin, allowing customers to access an extended catalog of video games on PC.

C. Mergers and Acquisitions

Over its 28 years of operation, EA has acquired around 40 gaming studios both in the US and internationally. Most of these studios have become defunct or merged into other entities over time. Some prominent acquisitions include Distinctive Software (1991), Bullfrog Productions (1995), Maxis (1997), BioWare (2007), and Respawn Entertainment (2017). The most recent acquisitions are Glu Mobile, Playdemic, and Metalhead software, which were all acquired in 2021, with Glu Mobile being the most expensive acquisition in EA's history ($2.4 Billion).

Apart from acquisitions, EA also has formed successful partnerships with major studios such as MGM Interactive and Disney Studios to obtain rights to develop games based on their IPs like James Bond, Star Wars, and so on. It has also partnered with Sony, Microsoft, and Valve to release EA-developed video games on their respective platforms.

D. Industrial Competitors and Market Share

EA's primary competitor was Activision Blizzard Entertainment, which is now owned by Microsoft. Other competitors include NetEase, Take-Two Interactive, and Roblox Corporation. As of Q4 2023, EA holds a market share of 2.98% in the software and programming sector, while Microsoft commands 84.84% of the market share. NetEase, Take-Two Interactive, and Roblox Corporation hold market shares of 5.44%, 2.10%, and 1.14%, respectively. Despite Microsoft's dominance, EA maintains a competitive position relative to its peers.

II. Ratio and Valuation Analysis

A. Financial Ratios

Financial ratios are essential tools derived from a company's financial data, facilitating comparisons and insightful analyses. These ratios are calculated using numerical data extracted from financial statements, providing valuable insights into the company's financial health and operational efficiency.

1. **Liquidity Ratios**: These ratios gauge EA's ability to meet its short-term financial obligations as they become due.
    a. Current Ratio: EA's current ratio stands at 1.21, indicating that the company possesses 1.2 times more assets than liabilities, which is a favorable indicator of its ability to cover debts.
    b. Quick Ratio: With a quick ratio of 1.21, EA can cover its current liabilities with 1.2 times more quick assets, reflecting a strong financial position.
    c. Cash Ratio: EA's cash ratio of 0.74 signifies that the company holds 0.74 times the amount of cash and cash equivalents required to cover current liabilities, aligning well with the preferred ratio range of 0.5 to 1, thus indicating robust liquidity.

2. **Profitability Ratios**: These ratios assess EA's profitability and overall performance.
    a. Gross Profit Margin (GPM): EA's GPM is robust at 76%. This signifies that for every dollar of revenue generated, the company retains $0.76 after accounting for the cost of goods sold, indicating a healthy gross profit margin.
    b. Operating Profit Margin (OPM): EA's OPM stands at 44%, reflecting that 44% of its profits come directly from operations before considering taxes and interest charges. This is a positive indicator of EA's strong profit margin from core business activities.
    c. Return on Assets (ROA): EA demonstrates a moderate ROA of 6%, meaning that for every dollar of assets, the company generates an income of $0.06. This metric highlights the company's efficiency in utilizing assets to generate earnings.
    d. Return on Equity (ROE): EA's ROE is reasonable at around 11%, indicating that for every dollar of shareholders' equity invested, the company generates an income of $0.11. This showcases the effectiveness of EA in using shareholder funds to generate profits.
    e. Return on Sales (ROS): EA's ROS is relatively healthy at 10.8%, implying that for every dollar of revenue generated, the company retains around $0.11 as profit after accounting for expenses, reflecting efficient management of sales and expenses.
    f. Return on Investment (ROI): The ROI for EA cannot be calculated due to missing information on investments from the financial reports.

3. **Debt-to-Equity Ratio**: The debt-to-equity ratio for EA stands at 0.26, indicating that the company has 0.26 times as much debt as it has equity. This signifies a relatively low level of debt in comparison to its equity, reflecting a favorable financial structure.

4. **Price Earnings Ratio (P/E Ratio):** EA's price-earnings ratio is $45.75, indicating that investors are willing to pay $45.75 for every dollar of earnings per share generated by the company. This demonstrates investors' willingness to pay a premium for EA's earnings, indicating strong growth prospects or high expectations for future earnings growth.

5. **Dividends Payout Ratio:** The company's Dividends Payout Ratio is 26.2%, revealing that EA is paying out 26.2% of its earnings as dividends to shareholders. This suggests that the company retains a significant portion of its earnings internally, providing opportunities for growth, acquisitions, research, and development, or other investments.

6. **Organization's Sustainable Growth Rate**: EA's sustainable growth rate is 8.1%, indicating the rate at which the company can grow its revenue without increasing debt or equity. This highlights EA's ability to achieve growth using internal resources such as retained earnings, showcasing a sustainable approach to expansion.

B. Capital Asset Pricing Model (CAPM)

CAPM is a financial model that is used to determine the anticipated return on investment by factoring in its risk and cost of capital. The significance of this model in business valuation lies in the fact that it provides a framework for evaluating the risk-adjusted rate of return of an investment relative to the market.

Upon conducting regression and slope analysis, the beta value of EA is determined to be 0.86. This beta value indicates that EA's stock is categorized as a defensive stock, implying lower volatility and somewhat lower returns compared to the market average. However, with a beta value close to 1, the impact of this lower return expectation is relatively minor.

Utilizing the beta coefficient of 0.86, the prevailing risk-free rate of return at 4.2% (as of 31st March 2024), and the market returns standing at 10.9%, the CAPM calculation yields an expected return rate of 10%. This implies that investors can anticipate a 10% return on investment from EA's stock, factoring in its risk profile, the risk-free rate, and the overall market performance.

C. Free Cash Flow Analysis

Upon reviewing the free cash flow for the years 2021, 2022, and 2023, it is noted that the operating free cash flow amounts to $1.8 billion, $1.7 billion, and $1.34 billion respectively. This observation indicates a decreasing trend in free cash flow over this period. In simpler terms, the company's ability to generate surplus cash after covering operational expenses and capital expenditures has declined over time.

This trend raises concerns as it could potentially limit the company's capacity to pursue growth opportunities, repay debts, or distribute value to shareholders through dividends or share buybacks. Hence, the company must analyze and address the factors contributing to this downward trend in free cash flow to ensure sustainable financial health and support future strategic initiatives.

D. Weighted Average Cost of Capital (WACC)

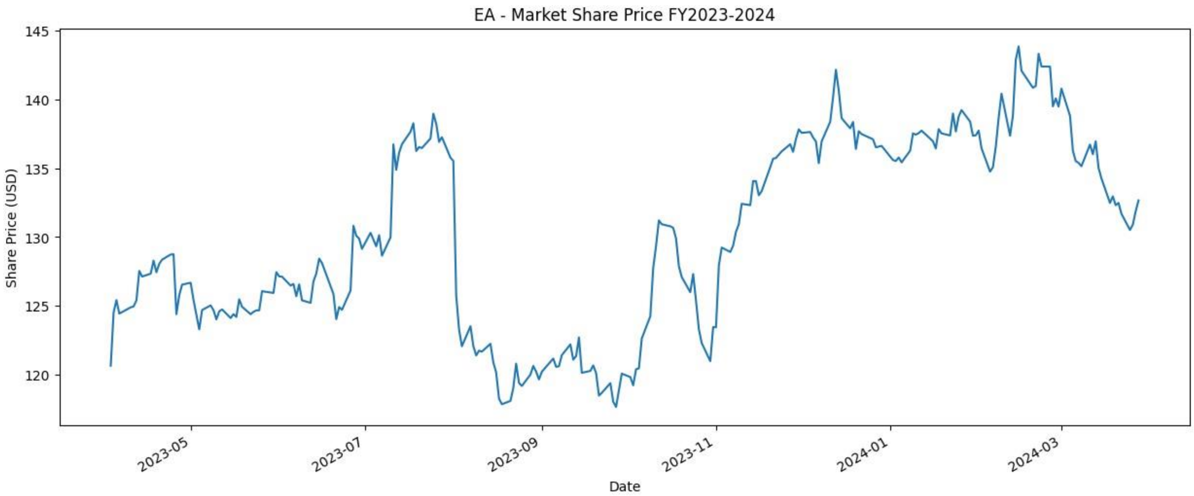
The weighted average cost of capital is a financial metric that represents the average rate of return that EA is expected to provide to its investors, including both debtors and shareholders, for financing its operations and various projects.

Upon calculation, the WACC for EA is determined to be 9.6%. In essence, this implies that EA is expected to generate returns of 9.6% or higher, on average, to effectively satisfy its investors' financial requirements.

By integrating WACC, growth rate, net income, and return ratio, the theoretical market share value for EA is computed at $3.95 billion. However, it's noteworthy that this theoretical value significantly deviates from the actual market price. This disparity may stem from various factors, including shifts in investor expectations, market sentiments influenced by news, global trends, geopolitical events, liquidity considerations, and trading volumes. These factors collectively impact the share price, leading to discrepancies between the calculated and actual market values.

III. Technical Analysis

A. One-Year Stock Price Analysis



On analyzing Electronic Arts (EA) stock prices for the financial year 2023-2024, the year commenced with EA's share price at $120.65 and concluded at $132.67, showcasing a progressive trajectory. Throughout this period, the stock reached its peak at $143.86 in February 2024, while hitting its lowest point at $117.65 in September 2023.

Despite experiencing minor fluctuations, EA's stock does not display significant volatility, suggesting a stable performance overall. The observed trend reveals a slight positive incline, with the share price increasing by approximately 10% from the commencement to the conclusion of the fiscal year.

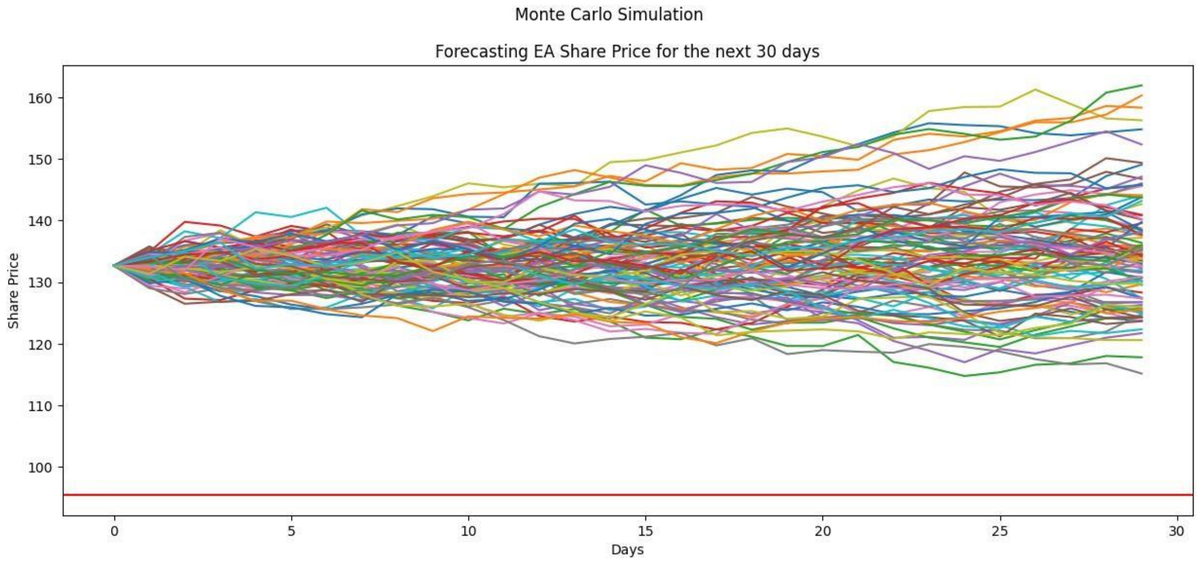
The consistent upward trajectory with reasonable volatility indicates favorable confidence in terms of the prospects of the company.

B. Monte Carlo Simulation

The Monte Carlo simulation is a quantitative model utilized for simulating future stock prices by considering factors such as volatility and historical returns. It's important to note that while Monte Carlo Simulation does not offer exact forecasts, it provides a range of potential values that could materialize.

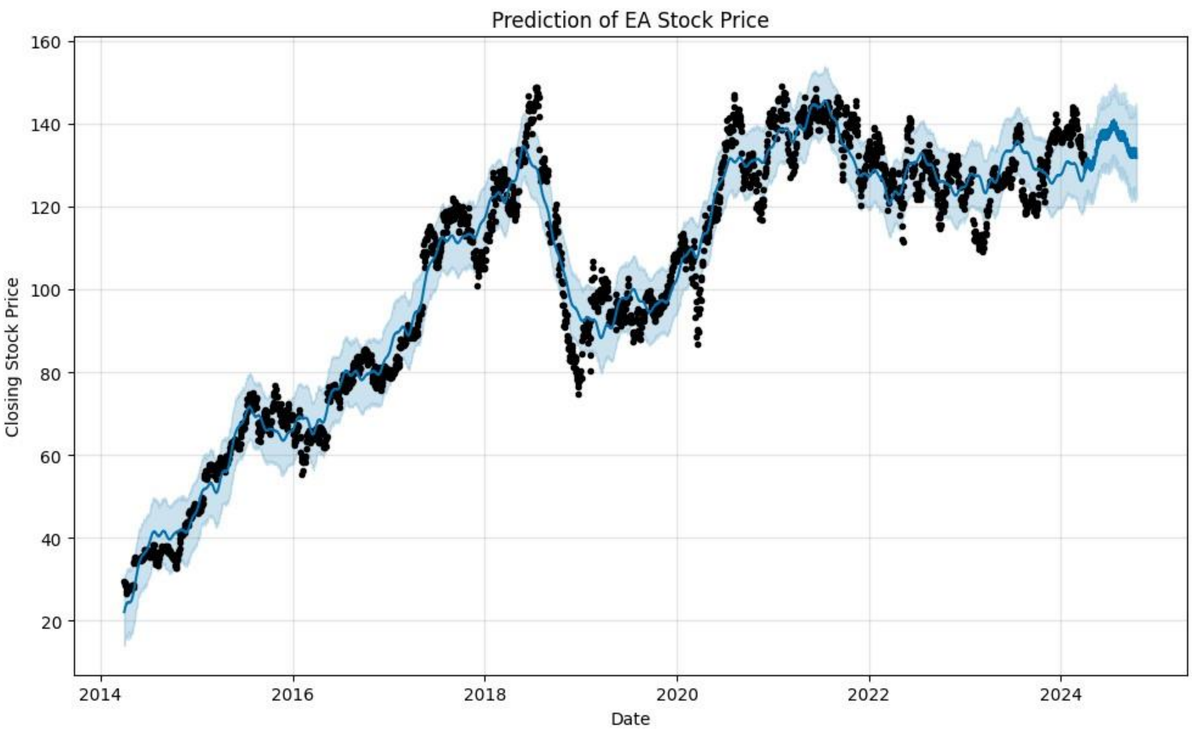
The plot illustrates 100 simulations aimed at modeling probable stock prices for the upcoming 30-day period, starting from March 31, 2024. The model indicates a plausible share price range spanning from $115 to over $154.

Upon examining the range of simulated price path movements, it can be inferred that the stock price is anticipated to exhibit some degree of volatility over the next 30 days.



C. Facebook Prophet Forecasting

FB Prophet implements a procedure for forecasting time series data based on an additive model that incorporates nonlinear trends, yearly, weekly, and daily seasonality, as well as holiday events. It is particularly effective for time series data exhibiting seasonal effects and it encompasses several seasons of historical data.



This analysis considers ten financial years of data spanning from 2014 to 2024 to conduct a thorough forecasting analysis for the stock price over the next 100 days. Examining the plot spanning the decade, a positive trend with cyclic patterns recurring at consistent intervals can be discerned. Notably, stock prices tend to peak towards the end of each year, which may be due to the holiday season.

Based on our forecasts utilizing this comprehensive model, we anticipate the stock price to reach approximately $135 at the end of the hundred days, with a projected high of $141 and a low of around $130. However, it's crucial to note that this prediction comes with a degree of uncertainty, as unforeseen economic or geopolitical events may impact the company's performance, potentially altering the forecasted outcomes.

IV. Recommendations

From this analysis of Electronic Arts (EA), these are the key takeaways:

1. EA demonstrates strong liquidity, and profitability, with a relatively low debt-to-equity ratio. This indicates a strong financial foundation.
2. All profitability ratios reflect healthy and efficient operations, and utilization of resources.
3. The Sustainable growth rate of 8.1% indicates a moderate capacity for expansion of the company.
4. The CAPM indicates a 10% return rate, even after factoring in the Risk profile of the company and market performance.
5. Free Cash Flow has been decreasing year-on-year, which is something to be wary of.
6. The Forecast model through FB Prophet suggests a model but stable growth, and the simulations from Monte Carlo Simulations show an overall positive trend, despite showing some volatility.

Considering all these key points, EA is a good company to consider investing in, as it is stable and consistent with its growth. However, investors should monitor the free cash flow trends, market conditions, or any industry developments that may impact the company’s performance. It is also important to understand that the stock, at this time, may not present an immediate opportunity for any significant gain or loss. It would be wise to continue monitoring the stock’s performance along with the market trends. Therefore, in conclusion, the most optimal recommendation at this point would be for the investor to “Hold”.

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