Specific Learning Differences Cover Note

Student ID: 190474351

Guidelines for markers assessing coursework and examinations of students diagnosed with Specific Learning Differences (SpLDs).

As far as the learning outcomes for the module allow, examiners are asked to mark exam/essay scripts sympathetically, ignoring the types of errors that students with SpLDs make and to focus on content and the student's understanding of the subject.

SpLDs may affect student performance in written work in the following ways:

- Spelling, grammar and punctuation may be less accurate than expected
- Organisation of ideas may be confused, affecting the overall structure of written work, despite including appropriate and interesting content
- Proof reading may be weak with some errors undetected, particularly homophones and homonyms which can avoid spell checkers

Under examination conditions, these difficulties are likely to be exacerbated, particularly towards the end of scripts.

When marking, please ensure the following guidance is adhered to:

- Scan the text for content to gain an overview of the work, to avoid making a judgement based on the structure alone or any minor spelling and grammar errors
- Do not comment solely on spelling and grammar issues, SpLD students are usually aware of this already. If you feel this is a major problem which has affected the sense of the writing, then please encourage the student to use their study skills support from DDS to help with this.
- Include positive and constructive comments amongst the feedback so that students can acknowledge their strengths but work with specialist study skills tutors on developing new strategies for areas of difficulty.
- Use clear English providing specific examples of what is right or wrong, to ensure that the student knows what to improve upon for future work

Colleagues in Schools and Institutes are asked to encourage students with specific learning differences to access the support provided by the Disability and Dyslexia Service if they have any concerns about a students work.

For more information regarding marking guidelines see the Institutional Marking Practices for Dyslexic Students on the DDS webpage.

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Online Assignment Submission

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Dissertation/Project Title: Investment Recommendation of Meta

Name of Supervisor: Goncalo Faria

Abstract

This report aims to provide an investment recommendation report for Meta. This report aims to provide a thorough assessment of the fair value of Meta and give an investment recommendation on whether to buy or sell. The methodology deemed most appropriate to perform such analysis is a Discounted Cash Flow (DCF) model. This report will also execute a relative assessment of Meta's value with the use of multiples. The DCF model provides an intrinsic value based on Meta's future cash flows, while the multiples approach assesses the relative value compared to industry peers. This report will analyse five years of historical financial data from Meta's financial statements and provide a forecast for the next five years. Additionally, internal value drivers specific to Meta's growth are established. The geopolitical and economic outlook are analysed, as they will indicate the performance of the overall industry.

This dissertation aims to provide an investment recommendation for Meta Platforms, Inc., using the company's stock price on June 28th 2024 of $504.22, as the evaluation point. The research primarily utilizes the Discounted Cash Flow (DCF) method to determine Meta's intrinsic value, forming the foundation for the investment suggestion. The detailed analysis of 5-years of historical financial data was undertaken, concentrating on Meta's financial statements. Additionally, an industry analysis was conducted by examining both current and past news to identify significant trends influencing Meta's business performance.

The DCF model yielded an implied share price of $564.11, which represents an 11.9% potential increase from the actual stock price of $504.22 on the analysis date. The enterprise value was calculated at $1.209 billion, and the equity value at $1.230 billion. To evaluate the robustness of these findings, a sensitivity analysis was carried out, which explored both conservative (bearish) and optimistic (bullish) scenarios. The bearish scenario suggested an implied share price of $505.51, indicating a slight 0.3% increase, whereas the bullish scenario projected an implied share price of $644.66, reflecting a substantial upside potential.

Ultimately, this dissertation supports a buy recommendation for Meta stock, based on the company's promising financial prospects and the potential for significant growth, even when considering different market conditions.

Contents

1. Introduction

Meta Platforms, Inc., formerly known as Facebook, Inc., is an American technology company based in Menlo Park, California. The company specializes in social networking services, digital advertising, and the development of augmented, virtual, and mixed reality products, with a growing focus on artificial intelligence. Operating globally, Meta delivers services through its Family of Apps (FoA), including Facebook, Instagram, Messenger and WhatsApp, as well as through Reality Labs (RL), which focuses on virtual, augmented, and mixed reality consumer hardware, software, and content. The share price of META as of today, 28th June 2024 was $504.22, according to the closing price under Nasdaq Stock Exchange (Yahoo Finance, 2024).

This dissertation aims to determine an implied share price for Meta by conduction a valuation exercise using the Discounted Cash Flow (DCF) model. The analysis begins with an examination of Meta's historical financial data and key ratios, setting the stage for the subsequent forecasting process. With this foundation, we project Meta's free cash flows over the next five years, including a terminal value to account for periods beyond the forecast. These projections are then discounted to their present value using Meta's weighted average cost of capital (WACC), which reflects the cost of equity calculated through the Capital Asset Pricing Model (CAPM) and the cost of debt, shaped by Meta's credit rating. After determining the enterprise value, we adjust for net debt and excess cash to find our equity value. The implied share price is run through a sensitivity analysis to explore how changes in key assumptions might influence the valuation. Finally, the implied share price is then compared with the current stock price and an investment recommendation is given.

The structure of this dissertation is as follows: Section 2 provides an overview of the data sources and key variables utilized in the DCF model. Section 3 explains the methodology framework and highlights the financial ratios used during the forecasting process. In Section 4, the results of the DCF analysis are presented, including the implied share price, and the sensitivity test conducted. Finally, Section 5 concludes with our investment recommendation based on the outcomes of the analysis.

2. Data

This chapter introduces the data used in our valuation analysis for Meta, Inc., which employs the discounted cash flow (DCF) method. By discounting Meta's future free cash flows to their present value, we assess the company's intrinsic value. This analysis involves a 5-year valuation technique, utilizing Meta's financial statements from 2019 to Q2-2024. In this section, we will outline the specific financial information used from the financial statements and how it was accessed.

2.1 Free Cash Flows to the Firm (FCFF)

In this dissertation, the core valuation technique used is the Free Cash Flows of the firm (FCFF), which represents the amount of cash flow generated from operations that is available for distribution after accounting for depreciation expenses, taxes, working capital, and investments (Adam Hayes, 2024). The FCFF is the primary metric used to measure Meta's profitability after all expenses and reinvestments have been accounted for.

2.1.1 Earnings Before Interest and Taxes (EBIT)

The Earnings before interest and taxes (EBIT) is the first building block of our DCF model. It allows us to understand the core profitability of Meta's business, focusing purely on operational activities, while excluding the effects of non-operational financial activities. This figure is listed as operating income on Meta's income statement.

2.1.2 Effective Tax Rate (t)

The effective tax rate (t) is the average rate at which Meta's pre-tax profits are taxed, in contrast to the statutory tax rate, which is the legal percentage established by law (Julia Kagan, 2024). This rate includes all taxes Meta may incur, including capital gains, dividend, payroll, property taxes etc. This figure is taken from the income statement of Meta.

2.1.3 Depreciation and Amortization (D&A)

Depreciation and amortization are the accounting method used to allocate the cost of tangible and intangible assets over their useful lives. Depreciation applies to physical assets, while amortization is used for intangible assets (Ross, 2024). The D&A figure is taken from the income statement of Meta.

2.1.4 Capital Expenditures (CapEx)

Capital Expenditures refers to the funds Meta uses to acquire, upgrade, or maintain physical assets such as property, industrial buildings, or equipment. These expenditures are reported under the 'Property, Plant, and Equipment' section of Meta's Cash Flow Statement.

2.1.5 Change in Net Working Capital (ΔNWC)

The change in net working capital reflects to the difference in a company's net working capital from one accounting period to the next. Net working capital is the difference between current assets and current liabilities. This figure can be calculated using items listed under the 'Changes in assets and liabilities' in Meta's Cash Flows Statement.

2.2 Weighted Average Cost of Capital (WACC)

The weighted average cost of capital represents the company's average after-tax cost of capital from all sources, including common stock, preferred stock, bonds, and other forms of debt. It indicates the average rate Meta expects to pay to finance its business (Marshall Hargrave, 2024). The WACC is calculated using the cost of debt (r_d), the cost of equity (r_e), the market value of debt (D), the market value equity (E) and the effective tax rate (t).

2.2.1 Cost of Debt (r_d)

The cost of debt is the total interest expense Meta incurs on its liabilities. Essentially, the cost of debt is the effective interest rate or the total amount of interest that a company or individual owes on any liabilities, such as bonds and loans (Hayes, 2024). In this report, the DCF model uses the after-tax cash flows, so the cost of debt is also calculated on an after-tax basis. The cost of debt is determined by adding the risk-free rate (r_f) to Meta's credit spread (CS), adjusted for taxes.

The credit default risk refers to the likelihood that a company will be unable to fulfill its financial obligations such as contractual payments or debt obligations (Ross, 2024). This risk is typically accessed by a credit rating agency such as Moody's, S&P, and Fitch provide rating describing the creditworthiness (probability of default) of corporate bonds. The credit spread is the additional yield investors require over a risk-free rate to compensate for this risk. As credit default risk increases, the credit spread widens, indicating higher perceived risk and the demand for greater returns (Ganti, 2024). Meta's current credit rating of Aa3 from Moody's (Moody's , 2024), an improvement from the previous rating of A1, suggests high credit quality with very low credit risk. The estimated credit spread for Meta is 0.6%, consistent with the average US-Aa3 credit spread rating (Longtermtrends, 2024).

2.2.2 Cost of Equity (r$_e$)

The cost of equity is the return required by shareholders for investing in Meta's equity. It is typically calculated using the Capital Asset Pricing Model (CAPM), which factors in risk-free rate (r_f), equity beta (β_e) and market risk premium (r_m - r_f) (Kenton, 2024).

The risk-free rate is the theoretical rate of return on an investment with zero risk, often derived from government bonds. For this report, the risk-free rate is based on the US 10-Year Treasury Bond rate of 4.343% (Yahoo Finance, 2024). Although a 5-year bond would align with the DCF model's time frame, the 10-year bond is chosen for added stability in forecasting future cash flows.

The equity beta, also known as the levered beta, measures the volatility of a Meta's stock compared to the broader market (The Investopedia Team, 2024). For this report, we compare Meta's performance against the Nasdaq Composite Index, which reflects the broader tech industry, providing insights into Meta's correlation with market-wide technology risk.

The market risk premium is the difference between the expected return on a market portfolio and the risk-free rate (Chen, 2024). Since Meta is in the US market, we can obtain the implied equity risk premium from Professor Aswath Damodaran of NYU. As of 1st July 2024 the market risk premium in the United States is recommended at 3.98% (Damodaran, 2024).

2.3 Perpetuity growth rate

The perpetuity growth rate is the constant rate at which a company's free cash flows are expected to grow indefinitely beyond the forecast period in a DCF model (Investopedia, 2022). Typically, this rate aligns with long-term economic indicators, such as the expected long-term growth rate of the economy or the inflation rate, because it's unlikely that a company can grow faster than the overall economy indefinitely. The perpetuity growth rate assumes that after the forecast period, the company will continue to grow at a steady, sustainable rate forever.

The real GDP growth rate can be estimated by the International Monetary Fund (IMF) under this assumption. The IMF estimates that the GDP growth rate from 2027 to 2029 is 2.1%. As it becomes increasingly difficult and uncertain to forecast beyond 2027, we infer that the expected perpetuity growth rate of the FCFF after 2029 follows the trend and remains at 2.1%.

Figure 1 below shows a graph plotting the IMF's historical and predicted trends of the inflation rate and the real GDP growth rate from years 2019 to 2029 (International Monetary Fund, 2024), (International Monetary Fund, 2024).
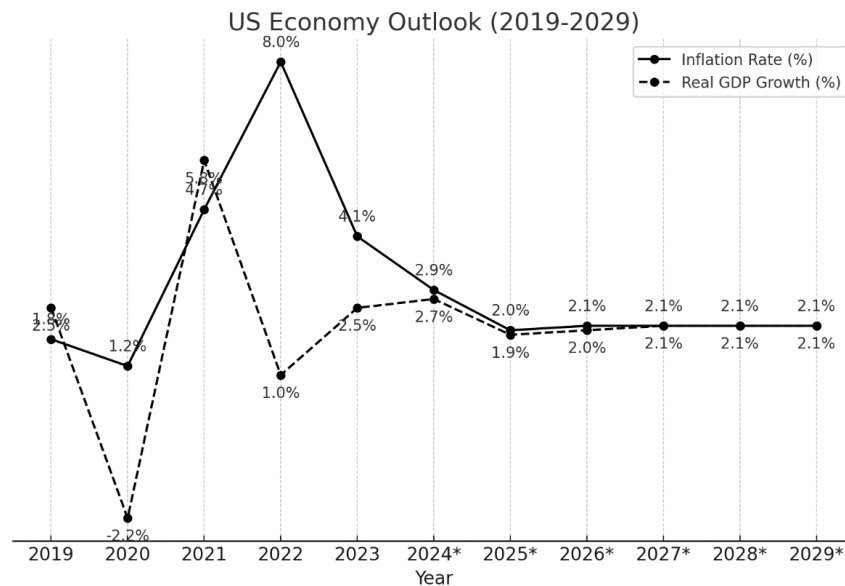
Figure 1: U.S. Economy Outlook (International Monetary Fund, 2024)

2.4 Terminal Value

The terminal value represents the value of the company at the end of the forecast period when cash flows are assumed to grow at a stable, indefinite rate (Ganti, 2024). The terminal value is calculated using the FCFF at the last estimated year, the WACC and the perpetuity growth rate.

2.5 Enterprise Value and Equity Value

The sum of all discounted cash flows yields the fair enterprise value of the company at the point of calculation, representing the present value of future free cash flows. The enterprise value reflects the overall worth of a company's assets as if fully financed by equity, making it a comprehensive measure that encompasses both equity and debt.

In reality, companies typically use a mix of debt and equity to finance their operations. The inclusion of debt provides a tax-shield, enhancing the value attributable to equity. After subtracting all debt from the enterprise value, the remaining figure represents the equity value available to shareholders.

This equity value is instrumental in determining the target price of Meta's shares and provides a key benchmark for comparing the company's intrinsic value with its current market (Investopedia, 2024). The valuation method, therefore, establishes a target share price based on the company's intrinsic value, allowing for a significant comparison with its current trading price.

3. Methodology

This chapter details how the data from Chapter 2 is utilised to construct the DCF model for Meta, Inc. It also explains the assumptions made when forecasted values. The chapter begins with the creation of our DCF model, followed by an explanation of the assumptions used in the calculation of variables in the DCF, finishing with how we plan to perform the sensitivity analysis.

3.1. Discounted Cash Flow Model

The first phase of our DCF model begins with a thorough evaluation of Meta's financial statements from the past five years (2019 - 2024). By analysing this historical data, we identify growth patterns and key relationships between revenue and other financial metrics, which serve as the foundation for projecting future free cash flows (Q3-2024 – 2029). In the second phase, we calculate the terminal value using the perpetuity growth method, representing the long-term value of the company beyond the projection period. These projected free cash flows and the terminal value are then discounted to their present value using Meta's weighted average cost of capital (WACC). Finally, we sum the present values of the projected cash flows and the terminal value to determine Meta's enterprise value. In the second phase, we calculate the terminal value using the perpetuity growth method, representing the long-term value of the company beyond the projection period. These projected free cash flows and the terminal value are then discounted to their present value using Meta's weighted average cost of capital (WACC). Finally, we sum the present values of the projected cash flows and the terminal value to determine Meta's enterprise value.

3.1.1 Historical Financial Performance

To accurately forecast the free cash flows to the firm (FCFF) from Q3-2024 to 2029, we must first analyse the historical financial statements of Meta. This should give us a clearer understanding on the key value drivers in the investment narrative and gain a deeper perspective of how the company is performing.

3.1.2 Projected Free Cash Flows

The first step in projecting future free cash flows involves analysing the 5-year historical revenues of the business. To assess Meta's revenue growth trends, I consider several factors, include financial and economic news at the industry, national, and global levels. Additionally, I take into account the company's future business strategies, as discussed in stockholder meetings, such as plans for research and development, and other long-term investments. These considerations create a more accurate projection of the future growth

rates (Q3-2024 -2029) by minimizing the impact of outliers. To further ensure accuracy, I calculated the compound annual growth rate (CAGR) from 2009 to 2023, which helps smooth out any anomalies in the growth trend.

3.1.3 EBIT Margin

The EBIT margin, also known as the operating profit margin, measures the percentage of revenue that remains after all operating expenses, excluding interest and taxes, have been deducted (Maverick, 2024). The historical EBIT margin is used as a benchmark for future EBIT projections as it provides a good overall operational performance and profitability of Meta's core activities. It reflects the efficiency of a company's core operations, and is expressed as a percentage:

EQUATION 1

$$\text{Operating Profit Margin} = \frac{\text{Operating Income}}{\text{Revenue}} \times 100$$

3.1.4 Effective Tax Rate

The effective tax rate (t) is the average rate at which a company's pre-tax profits are taxed. It gives a more accurate representation of the actual tax burden a company faces compared to the statutory tax rate, which is the legal tax rate set by the government (Segal, 2024). As the annual tax expense of the company is highly dependent on the state tax regimes, the forecasted effective tax rate for all projected tax expenses are set to the average of the past 3-years.

3.1.5 Capital Expenditures to Depreciation and Amortization Ratio

The CapEx to D&A Ratio is a financial metric that compares a company's capital expenditures (CapEx) to its depreciation and amortization (D&A) expenses. This ratio allows us to access how much Meta is investing in maintaining or expanding its asset base relative to the wear and tear (depreciation) and amortization of its existing assets. A CapEx to D&A ratio greater than one indicates that Meta is not only maintaining its current operations but also investing in new assets and infrastructure to support growth. During Meta's 2024 Q2 earnings call, the company has stated that they expect significant CapEx growth in 2024 to 2025 as they invest to support their AI research (Meta, Inc., 2024). This has been the consistent outlook of Meta since 2022, therefore the growth trends from the CapEx from 2022 to 2024 will be used as the consistent growth in CapEx for projected years 2025-2029.

3.1.6 Change in Net Working Capital

The net working capital (NWC) is the difference between a company's current assets (i.e. inventory, accounts receivable) and its current liabilities (i.e. accounts payable). It represents the short-term liquidity of the company. The change in net working capital refers to the year-over-year or period-over-period change in NWC. An increase in NWC means that the company has more of its capital tied up in its operations, which might reduce its cash flow.

3.1.7 Free Cash Flow to the Firm

The free cash flow to the firm (FCFF) represents the amount of cash flow from operations available for distribution after accounting for depreciation and amortization expenses, capital expenditures, change in net working capital, and taxes. FCFF is a measurement of a company's profitability after all expenses and reinvestments (Hayes, 2024).

EQUATION 2

FCFF = EBIT + D&A - CapEx - ΔNWC − t

3.1.8 The Weighted Average Cost of Capital

The WACC is calculated using the and terms from section 2.2, cost of equity (r_e), cost of debt (r_d), the market value of debt (D), the market value equity (E) and the effective tax rate (t). The formula is shown below:

EQUATION 3

$$\text{WACC} = \left(\frac{E}{E+D} \times r_e \right) + \left(\frac{D}{E+D} \times r_d \times (1-t) \right)$$

The cost of debt (r_d) after tax is calculated by the sum of risk-free rate (r_f) and credit spread adjusted after tax. The formula is represented below:

EQUATION 4

After-Tax Cost of Debt = (Risk-Free Rate + Credit Spread) × (1−Tax Rate)

The cost of equity (r_e), is calculated using the CAPM. The formula is represented below:

EQUATION 5

Cost of Equity (r_e) = r_f + β_e × (r_m - r_f)

The equity beta (β_e) for Meta is estimated through a regression analysis of Meta's stock performance against the Nasdaq Composite Index. To reduce noise and achieve a more stable result, weekly average of both stock prices will be used instead of daily averages. Historical data for both Meta's stock and the Nasdaq Composite will be collected from Yahoo Finance, covering a 5-year period from June 28, 2019, to June 28, 2024.

The return of Meta and the Nasdaq weekly stock prices are calculated and used as the base for the regression analysis. In this analysis, Meta's returns are plotted as the dependent variable (Y-axis) against Nasdaq's returns as the independent variable (X-axis). The slope of the resulting regression line represents the equity beta (βe), which quantifies Meta's stock sensitivity to market movements. A beta greater than 1 indicates higher volatility relative to the market, while a beta less than 1 suggests lower volatility. This beta is crucial for understanding Meta's systematic risk and calculating its cost of equity.

EQUATION 6

$$\beta_e = \frac{\text{Cov(Meta's Returns, Nasdaq's Returns)}}{\text{Var(Nasdaq's Returns)}}$$

With the calculated equity beta (β_e), we are then able to calculate the cost of equity (r_e) and compute the WACC of Meta.

3.1.9 Terminal Value

Using the calculated WACC above, we are now able to calculate the terminal value based on the free cash flow in 2029, the perpetual growth rate (g), and the Weighted Average Cost of Capital (WACC). The formula for this calculation is represented below:

EQUATION 7

$$\text{Terminal Value} = \frac{\text{FCF}_{2029} \times (1 + g)}{(\text{WACC} - g)}$$

3.1.10 Enterprise Value and Equity Value

To calculate the enterprise value for Meta we will need the projected free cash flow, terminal value and the WACC. Using these variables, we can calculate the enterprise value using the sum of net present values (NPVs) of all future free cash flows that a company is expected to generate, including the net present value of its terminal value, discounted at the company's weighted average cost of capital (WACC). The formula of the enterprise value is represented below:

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EQUATION 8

$$\text{Enterprise Value} = \left(\sum_{t=1}^{n} \frac{\text{FCF}_t}{(1 + \text{WACC})^t} \right) + \frac{\text{Terminal Value}}{(1 + \text{WACC})^n}$$

With the enterprise value calculated, we can then also calculate the equity value. As the equity value is the portion of the enterprise value that belongs to the shareholders after accounting for the company's debt, preferred equity, and minority interest. This value reflects the true market value of the company's equity holdings. The formula of equity value is represented below:

EQUATION 9

$$\text{Equity Value} = \text{Enterprise Value} - \text{Net Debt} - \text{Minority Interest}$$

Where:

$$\text{Net Debt} = \text{Total Debt} - \text{Cash and Cash Equivalents}$$

- **Total Debt:** The sum of all short-term and long-term debt obligations that the company has.
- **Cash and Cash Equivalents:** The company's liquid assets, including cash on hand and other assets that can quickly be converted to cash.
- **Net Debt:** Represents the company's total debt after accounting for its cash reserves.
- **Minority Interest:** The value of the portion of subsidiaries not owned by the parent company.

3.2 Sensitivity Analysis

To ensure the reliability of our calculations and assumption made in the DCF model, a sensitivity analysis is conducted. This analysis highlights how changes in factors like growth rates and discount rates can impact our final valuation. This process evaluates how changes in key assumptions such as the Weighted Average Cost of Capital (WACC), the terminal growth rate and the growth rate of free cash flow items impact our implied share price (Kenton, 2024). In this report, a bear market scenario (conservative) and a bull market scenario (aggressive) were used as our sensitivity analysis.

The bear case scenario considers a more cautious outlook, with slower revenue growth, higher operating costs, and increased market risks, leading to a conservative estimate of Meta's valuation that highlights potential downside risks. In contrast, the bull case scenario assumes a more optimistic environment, characterized by stronger revenue growth, lower costs, and favourable market conditions, offering insight into the potential upside if the company performs well (Kramer, 2024). By examining these two scenarios, we can better understand how a conservative versus an optimistic outlook might impact our overall base case, helping us capture the range of possible outcomes for Meta's valuation and providing a comprehensive view of the potential risks and opportunities.

4. Results

This chapter will present the results of our DCF model broken up into four parts: the historical analysis on financial statements, forecasting of future cash flows, the implied share price and the sensitivity analysis.

4.1 Historical Financial Performance

This section provides an analysis of Meta's financial performance over the past five years (2019-2023) to establish a foundation for forecasting future cash flows and conducting a valuation using the Discounted Cash Flow (DCF) model. By examining key financial metrics, we can understand the trends and anomalies that have shaped Meta's recent financial history and set the stage for making informed projections.
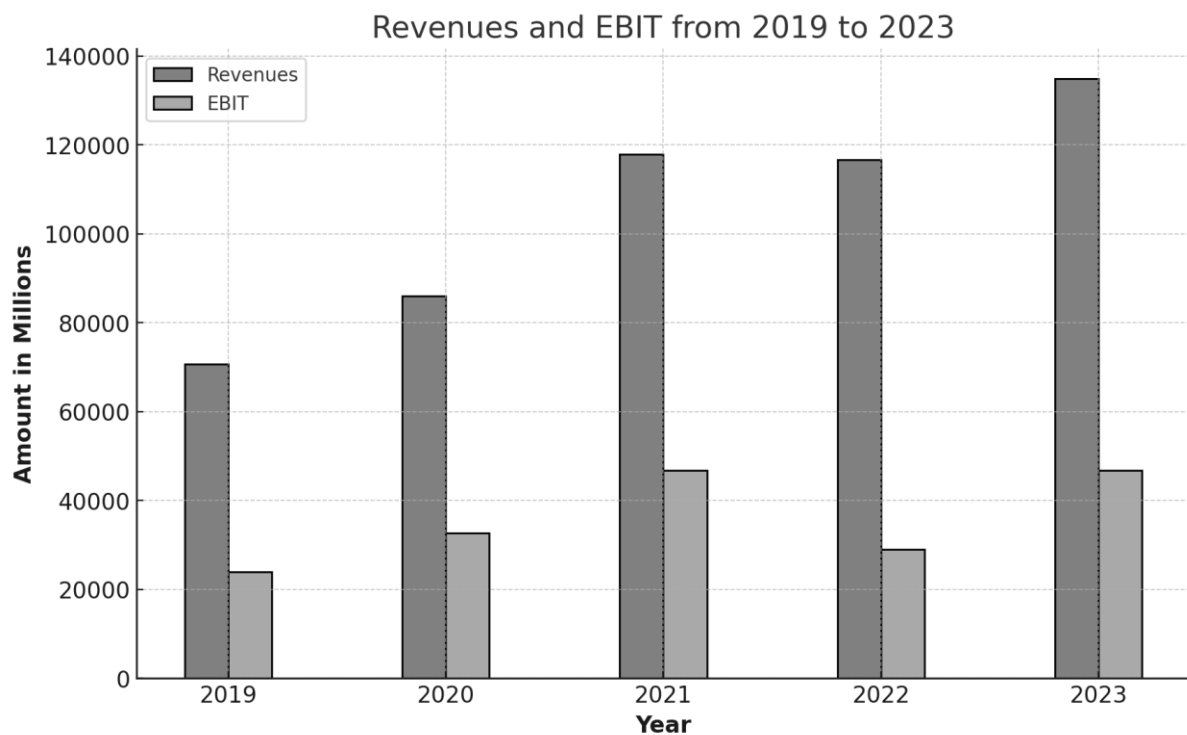
FIGURE 2: COMPARISON OF REVENUES AND EBIT (2019-2023)

Meta's financial statements from 2019 to 2023 reveal a relatively consistent year-on-year growth in revenue, with the exception of 2022. While the EBIT generally followed the revenue trend, rising from $23,986 million in 2019 to a peak of $46,753 million in 2021. However, in 2022, EBIT dropped sharply in line with revenue, before rebounding in 2023 to nearly match its previous peak. Early 2024 indicators from the Q2-2024 financial statements, suggest that Meta is on track to achieve its highest EBIT to date, driven by strong performance in the first half of the year.
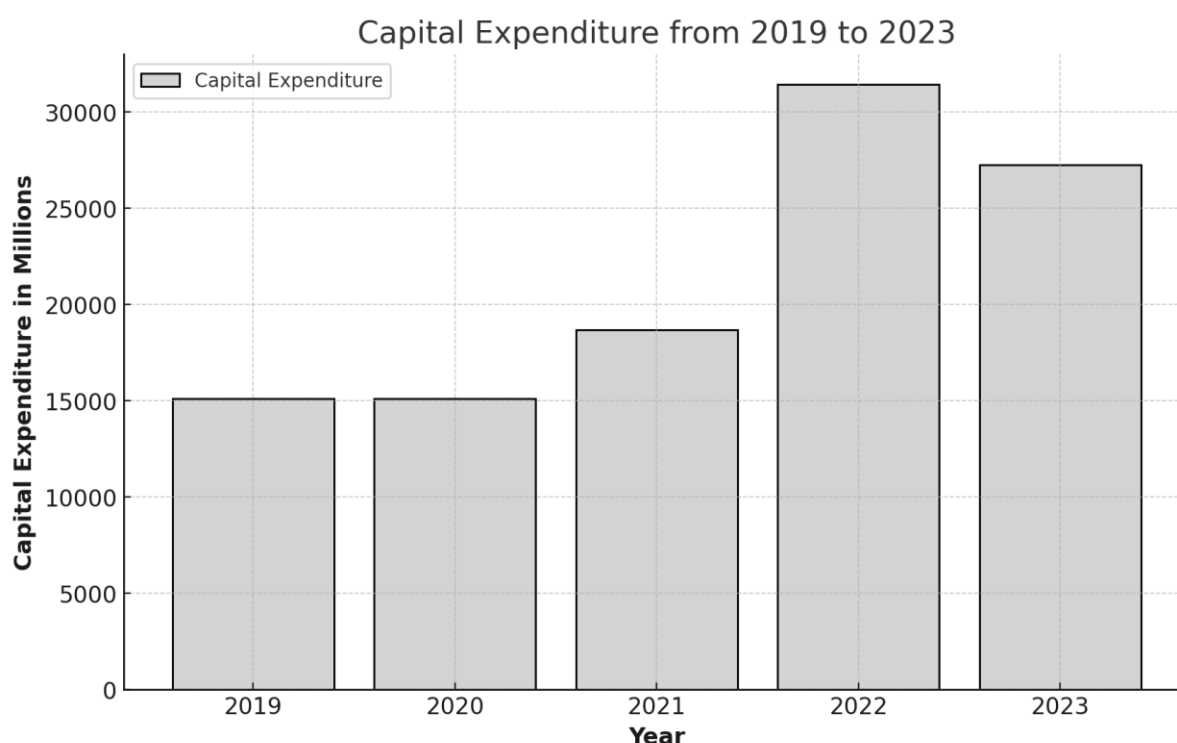
FIGURE 3: ANNUAL CAPITAL EXPENDITURE

The significant decline in Meta's revenue and EBIT in 2022 can largely be attributed to its significant capital expenditures in the metaverse. This strategic shift from its core social media platforms to virtual and augmented reality (A.I) technologies saw the company's CapEx to rise by 68% from 2021, which drove up costs without delivering immediate returns. This move unsettled investors, leading to scepticism about Meta's future profitability and contributing to a drop in its stock price (Vanian, 2024).

During this period, Meta also face external pressures, such as Apple's App Tracking Transparency update, which limited Meta's ability to deliver personalized ads and thus cutting into its ad revenue. Competition from TikTok further eroded its market share, especially among younger users. Additionally, economic challenges like inflation, higher interest rates, and a strong U.S. dollar also hit Meta hard, reducing consumer spending and ad budgets (Leswing, 2024). Moreover, the ongoing regulatory scrutiny and legal challenges added to the company's financial burdens. Despite the broader sell-off in the tech sector, Meta's heavy investment in the metaverse, combined with these external challenges, was the primary driver of its financial struggles in 2022, significantly impacting its profitability.

However, 2023 saw Meta's revenue increase to $134.9 billion, a 16% year-over-year increase. This was in large part due to the increase in user engagement of Meta's Family of Apps (FoA), with a user base of 3.19 billion in December 2023, an 8% year-over-year

increase. The technologies that Meta had heavily invested in; particularly artificial intelligence began to generate meaningful revenue, through their 'Reels' monetization. This growth reflects Meta's success in maintaining and even expanding its user base amid intense competition and market saturation (Meta, Inc., 2024)

As of the current first half of 2024, Meta is on track to achieve some of its most impressive financial results. Recent reports indicate that the application of Meta's A.I in how they create ads, has positioned them to have a 10% increase in the global average price per ad. The company's ability to integrate new technologies into its core business has positioned it for sustained growth, despite the continued high CapEx on research and development.
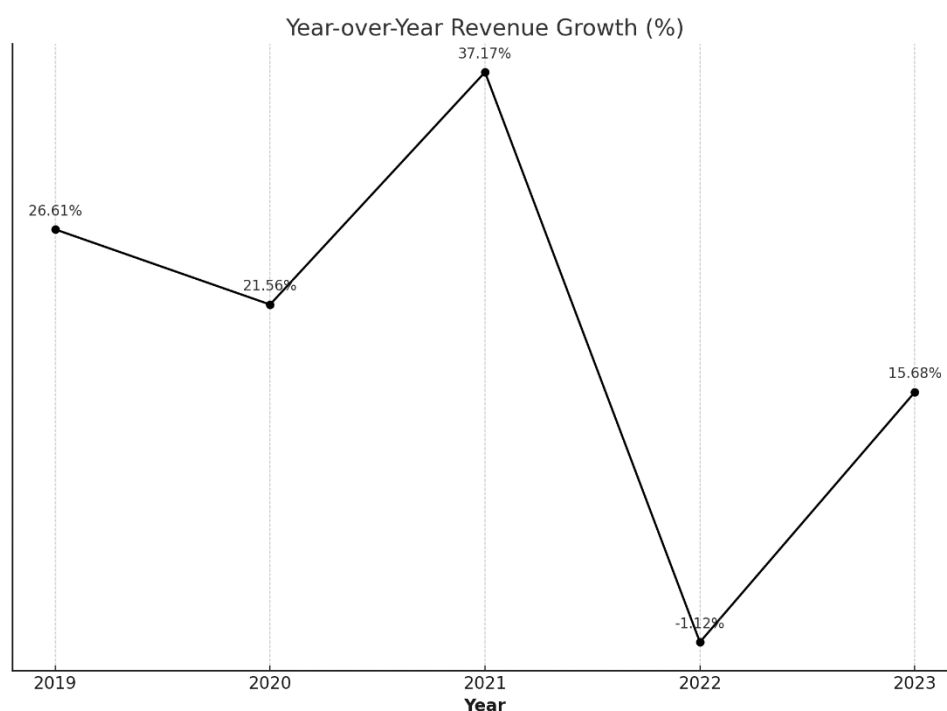
FIGURE 4: GROWTH RATES OF REVENUES (2019-2023)

Over the past five years, Meta has experienced significant growth in revenue, with steady increases until 2022, when the company faced a notable decline. This drop disrupted the previously strong growth trajectory, largely due to internal strategic shifts and external market pressures. However, by 2023, Meta managed to recover, demonstrating resilience and adaptability. This recovery was driven by successful investments in artificial intelligence and an expanding user base across its Family of Apps, signalling a potential return to sustained growth. However, the anomaly of 2021-2022 cautions against overly optimistic projections. While the growth trends suggest confidence in Meta's ability to grow, the unpredictability introduced by high CapEx and ongoing external challenges (like competition, regulatory issues, etc.) warrants a cautious approach.

Income Statement	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revenue	7,872	12,466	17,928	27,638	40,653	55,838	70,697	85,965	117,929	116,609	134,902
% growth		58%	44%	54%	47%	37%	27%	22%	37%	(1%)	16%

Years	Compound Annual Growth Rate
10	32.86%
9	30.29%
8	28.69%
7	25.42%
6	22.13%
5	19.29%
4	17.53%
3	16.21%
2	6.95%
1	15.69%
5-Y AVG	15.13%
10-Y AVG	21.51%

TABLE 1: CAGR OF REVENUE

To account for the volatility from 2021 to 2022, we calculated the Compound Annual Growth Rate (CAGR) for each year from 2013 to 2023, starting with a 10-year interval down to a 1-year interval. The final CAGR was determined by averaging these 10 individual CAGRs, providing a more stable growth rate estimate. The 10-year average of the CAGRs of 21.51% is used as our projected growth rate in revenues for 2024. The subsequent revenue growth rates for our future years (2025-2029) are projected to decrease year-over-year to match the previous year's inflation rate from figure 1.
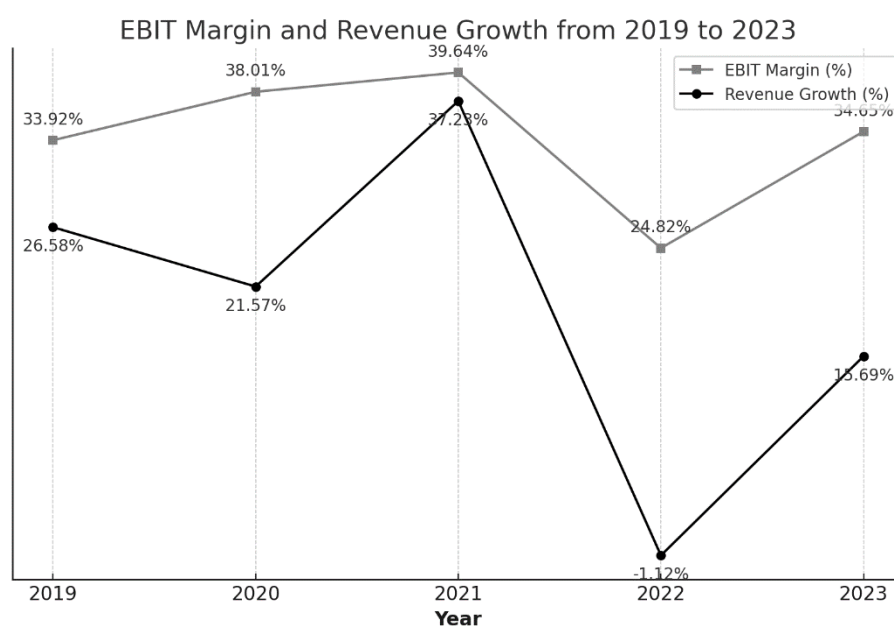

FIGURE 5: EBIT MARGINS AND REVENUE GROWTH (2019-2023)

As the EBIT margin closely follows the same trends as the revenue growth, can use it as a reference to project our future EBIT. According to Meta's Q2-2024 earnings call, the EBIT margin for the first two quarters of 2024 stands at 38%, with a full year projection of 39% (Meta, Inc., 2024). To account for the year-over-year growth in the EBIT margin, based on historical data, we can increase the yearly EBIT margin by 1%, consistent with the stable growth rates observed in 2020-2021.

Meta's capital allocation strategy will remain unchanged, as mentioned in the Q2-2024 earnings call. The company plans to continue investing in both enhancing its core experiences in the near term and developing technologies that are expected to transform how people engage with its services in the years ahead (Meta, Inc., 2024). According to this earnings call, the projected CapEx for 2024 is expected to be between $37-40 billion. Based on this range, the estimated CapEx for 2024 is projected at $38.5 billion, with the year-over-year growth rate of CapEx relative to revenue remaining constant at 24% from 2024 to 2029, in line with Meta's future plans on capital allocations.
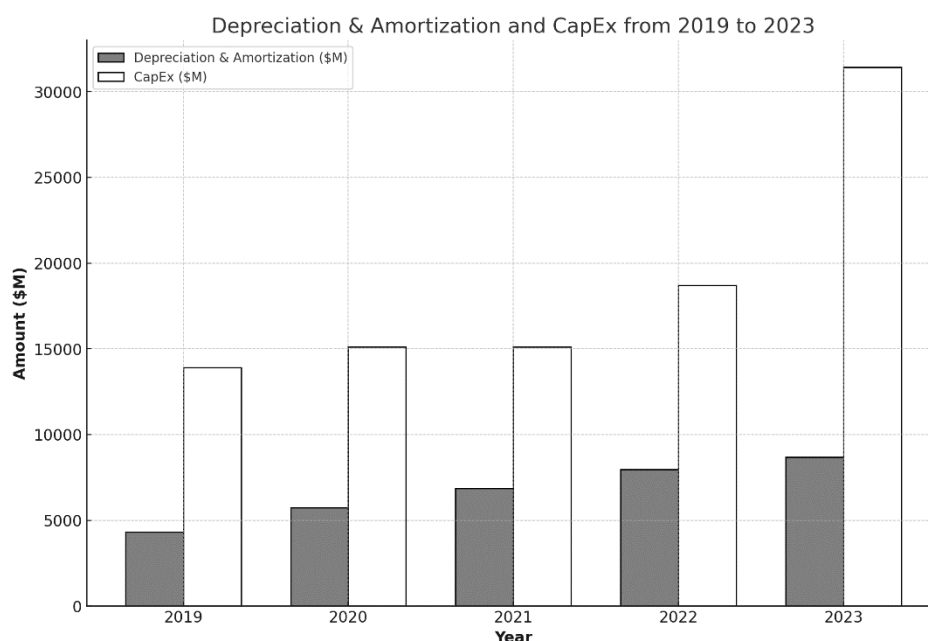
Based on figure 6, we can see that despite the huge spike in CapEx from 2022 onwards, the D&A showed little to no correlation. This is likely because most of the CapEx spent in those two years were largely in research and development.
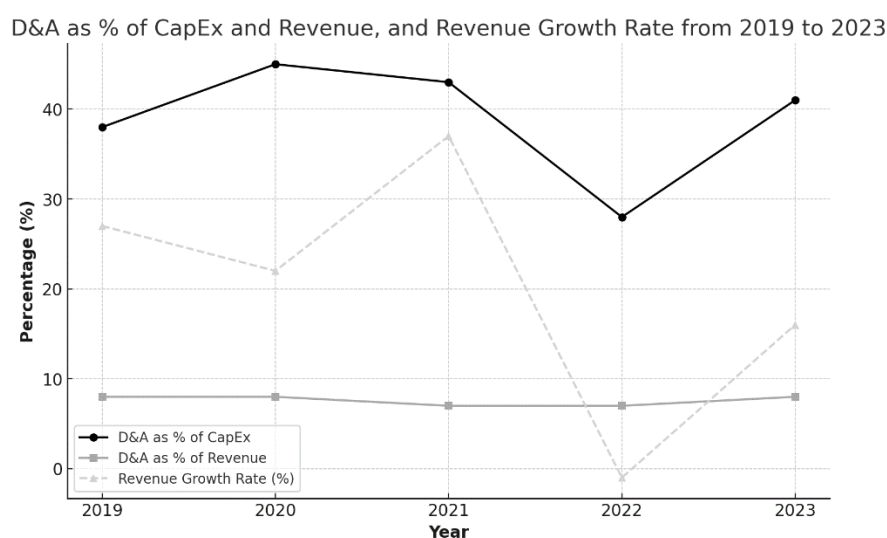
FIGURE 7: D&A RELATIONSHIP WITH CAPEX AND REVENUE, REVENUE GROWTH

However, figures 6 and 7 clearly show that despite changes in CapEx and revenue, the D&A growth rates remains fairly consistent, averaging an 8% increase over the 5-year period. With Meta's recent investment in more hardware such as graphics cards to train their A.I model (Kan, 2024), we adjust for the projected D&A growth rates to rise by 1% every two years.

Income Statement	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revenue	7,872	12,466	17,928	27,638	40,653	55,838	70,697	85,965	117,929	116,609	134,902
% growth		*58%*	*44%*	*54%*	*47%*	*37%*	*27%*	*22%*	*37%*	*(1%)*	*16%*

Cash Flow Items	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Change in Net Working Capital	676	-262	784	758	1,887	-1,527	7,250	-2,723	700	5683	3836
% of sales	*67%*	*(21%)*	*40%*	*32%*	*62%*	*(35%)*	*126%*	*(40%)*	*9%*	*65%*	*34%*
% of Change in Sales		*(6%)*	*14%*	*8%*	*14%*	*(10%)*	*49%*	*(18%)*	*2%*	*(431%)*	*21%*

TABLE 2: CHANGE IN NET WORKING CAPITAL RELATIONSHIP WITH CHANGE IN SALES

Table 2 illustrates the annual change in net working capital (ΔNWC) from 2013 to 2023 and its relationship with revenue and change in revenue. As 2022 saw large changes in the CapEx and a decrease in overall revenue, the ΔNWC in 2022 produces an extreme outlier especially in the ΔNWC expressed as a percentage of change in revenue. Due to this volatility, the projected ΔNWC are calculated with the change in revenue growth correlation approach of the past 10-years but excluding the outlier value of 2022. The calculated ΔNWC expressed as a percentage of change in revenue from 2024 to 2029 is 8%. As explained in section 4.1.4, the forecasted effective tax rate for the projected tax expenses from 2024 to 2029 is 18%.

All the historical data were sourced directly from the financial statements provided by Meta. The key ratios discussed in this section are displayed in appendix 1.

4.2 Forecasting Free Cash Flows

Using the estimates and projections derived from the historical analysis, we now calculate the projected free cash flows (FCFF) for Meta from 2024 to 2029. These projections are essential for the valuation process, as they serve as the foundation for determining Meta's implied share price using the Discounted Cash Flow (DCF) model.

The projected free cash flows and the relevant growth rates are shown in appendix 2.

4.3 The Discounted Cash Flow Model

With the projected free cash flows (FCF) in place, we can proceed to calculate the implied share price using the DCF model. The first step involves calculating the weighted average cost of capital (WACC), which will serve as the discount rate in the DCF model.

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.611141867
R Square	0.373494382
Adjusted R Square	0.371075441
Standard Error	0.045425015
Observations	261

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.318602386	0.3186024	154.4041	4.05289E-28
Residual	259	0.534428881	0.0020634		
Total	260	0.853031267			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%
Intercept	0.001	0.003	0.51	0.61	-0.4%
X Variable 1	1.12	0.09	12.43	0.00	94%

TABLE 3: REGRESSION ANALYSIS OF THE STOCK PRICES OF META AND NASDAQ

As outlined in section 3.1.8, to estimate the equity beta, a regression analysis is conducted, comparing Meta's stock prices against the Nasdaq over a 5-year period from June 28, 2019, to June 28, 2024. The regression yielded an estimated equity beta of 1.12, which indicates the volatility of Meta's stock relative to the broader market.

Equity Beta	1.12
Risk-Free Rate	4.34%
Market-Risk Premium	3.98%
Cost of Equity	8.81%

Credit Spread	0.6%
Risk Free Rate	4.34%
Tax Rate	18%
Cost of debt	4.05%

TABLE 4: COST OF EQUITY

Using the equity beta of 1.12, along with a market-risk premium of 3.98% and a risk-free rate of 4.34%, we estimated the cost of equity using Equation 5. This calculation yielded a cost of equity of 8.81%. The cost of equity represents the return required by equity investors given the risk associated with holding Meta's stock. Similarly, the cost of debt was calculated using Equation 4. This calculation incorporates a credit spread of 0.6%, a risk-free rate of 4.34%, and an effective tax rate of 18%, resulting in an estimated cost of debt of 4.05%. The cost of debt represents the effective rate that Meta pays on its borrowed funds, adjusted for tax considerations.

WACC	
Market Cap	1,280
% of Equity	97.12%
Cost of Equity	8.81%
Risk Free Rate	4.34%
Beta	1.12
Market Risk Premium	3.98%
Debt	37.99
% of Debt	2.88%
Cost of Debt	4.05%
Tax Rate	18.00%
Total Debt and Equity	1,318
WACC	8.65%

TABLE 5: WACC CALCULATION

As of June 26, 2024, Meta's market capitalization stood at $1.28 trillion, with a total debt of $37.991 billion (Yahoo Finance, 2024). This translates into an equity and debt weightage of 97.12% and 2.88%, respectively. By applying these values with the equity beta into equation 3, the weighted average cost of capital (WACC) is calculated at 8.65%, which will be used to discount the projected free cash flows from appendix 2.

DCF	0	1	2	3	4	5
	2024 E	2025 E	2026 E	2027 E	2028 E	2029 E
Unlevered FCF	24,029	30,005	38,764	46,143	56,514	64,339
Present Value of UFCF	23,772	28,183	33,512	36,714	41,386	43,365

Initial Discount Year	0.51					
Discount Period	0.25	0.75	1.75	2.75	3.75	4.75
Terminal Value					$	1,002,735
Present Value of Terminal Value					$	675,852
Enterprise Value					$	1,209,668
(+) Cash						58080
(-) Debt						37,991
Equity Value					$	1,229,757
Shares Outstanding						2,180
Implied Share Price					$	564.11

TABLE 6: IMPLIED SHARE PRICE

To calculate the implied share price, we began by estimating the terminal value, which represents the value of the company beyond the forecast period in 2029. The terminal value was calculated based on the free cash flow (FCF) of $64,339 million in 2029, assuming a modest growth rate of 2.1%. This terminal value was then discounted back to its present value using the weighted average cost of capital (WACC) over the relevant discount period.

Next, the present values of the projected unlevered free cash flows (UFCF) for each year from 2024 to 2029 were calculated, also discounted using the WACC according to their respective discount periods. The sum of these discounted cash flows and the present value of the terminal value provided the enterprise value of $1,209,668 million.

From the enterprise value, we added cash holdings of $5,080 million and subtracted net debt of $37,991 million (Meta, Inc., 2024), figures sourced directly from Meta's financial statements, to arrive at an equity value of $1,229,757 million. Finally, dividing the equity value by the total number of shares outstanding, which was 2,180 million, the derived the implied share price as of June 28th, 2024 is $564.11.

4.4 Scenario Analysis

The implied share price of $564.11 from our DCF model, represents Meta's intrinsic value based on projected future cash flows. Comparing this with the current market price helps investors assess whether the stock is undervalued or overvalued by the market, guiding potential investment decisions. However, it is important to consider the uncertainty inherent in financial forecasting. Our estimations are based on current data and assumptions, but these could be impacted by various factors, such as changes in the broader economy, shifts in market conditions, or unforeseen developments within the company itself. Given these potential risks and opportunities, it's crucial to perform a sensitivity analysis.

As explained in section 3.2, a sensitivity analysis allows us to explore how different scenarios might affect our valuation. By adjusting key variables, such as revenue growth rates, cost of capital, or terminal value assumptions, we can assess how changes in the economic environment or Meta's performance could influence the implied share price. Using recent news articles and reports, on Meta and the overall market. We can create a bear case and a bull case to compare with our base case.

Bear Case:

As Meta continues to face significant regulatory and legal challenges, particularly in Europe. These legal obstacles, coupled with ongoing scrutiny over its data practices, could hinder Meta's growth and stifle innovation, especially in emerging technologies like AI and the metaverse (Woollacott, 2024). Additionally, Meta's commitment to increasing its capital expenditures (CapEx) on Reality Labs presents a substantial risk. The ongoing financial drain from Reality Labs could weigh heavily on Meta's profitability, particularly if the expected returns from these investments do not materialize as quickly as anticipated. This could exacerbate concerns about the sustainability of Meta's growth and its ability to maintain its current valuation, especially as its core advertising business may face headwinds.

Bull Case:

Conversely, the bull case underscores Meta's strong financial performance and its leading position in the digital advertising space, bolstered by its increasing user base and higher price per ad. The company's significant investments in AI are already enhancing ad effectiveness and user engagement, positioning Meta to capitalize on the expected growth in the digital advertising industry. Moreover, while the metaverse is still in its infancy, Meta's pioneering efforts could unlock new revenue streams and drive long-term growth, potentially transforming the company into a major force in the tech industry. Despite current valuation concerns, these growth opportunities suggest that Meta is well-positioned to deliver substantial returns in the future. According to CEO Mark Zuckerberg, Meta's AI is on track to becoming the most widely used AI by the end of 2024 (Meta, Inc., 2024).

Meta DCF

Ticker	META	Implied Share Price	$564.11	$505.51 - $ 644.66	
Date	28/06/2024	Current Share Price	$504.22	Implied upside (downside)	11.9%

Assumptions

Switches		Conservative		Street / Base		Optimistic	
Revenue	2	Revenue 2025	80.0%			Revenue 2025	110.0%
EBIT	2	Revenue 2026	60.0%			Revenue 2026	110.0%
D&A	2	Revenue 2029	7%	Revenue 2029	9%	Revenue 2029	11%
CapEx	2	EBIT 2025-26	90.0%			EBIT 2025-26	115.0%
WACC	2	EBIT 2029	40.0%	EBIT 2029	44.0%	EBIT 2029	48.0%
TGR	2	D&A Trend	95.0%			D&A Trend	110.0%
		CapEx Trend	105.0%			CapEx Trend	85.0%
WACC	8.7%	WACC	9.2%	WACC	8.7%	WACC	8.2%
TGR	2.1%	TGR	1.6%	TGR	2.1%	TGR	2.6%

TABLE 7: ADJUSTED KEY VARIABLE PERCENTAGE

Given the potential outcomes discussed in the bull and bear cases, we can quantify these scenarios by adjusting key variables in our model to see how they might impact Meta's valuation. The adjusted variables are shown in table 7 and the Bear and Bull DCF models are shown in appendix 3,4 respectively. The bearish case produces an implied share price of $505.51, while the bullish case produces an implied share price of $644.66.

5. Conclusion

Meta Platforms, Inc., has long been recognized as a dominant force in the technology sector. With its vast user base and unparalleled influence in the social media and digital advertising space, Meta has consistently been regarded as a stable and innovative company. The company's ability to adapt and expand its offerings has helped it to maintain a strong market position over the years. However, in 2022, Meta faced a significant rebranding and encountered numerous challenges that cast doubt on its future prospects. The company grappled with regulatory hurdles, financial struggles, and scepticism surrounding its strategic pivot toward the metaverse, leading to an uncertain outlook and widespread doubt about its ability to navigate these turbulent waters.

Despite these challenges, Meta demonstrated remarkable resilience. By 2023, the company began to bounce back, regaining investor confidence and laying the groundwork for future growth. This recovery accelerated in 2024, with Meta's latest reports indicating exceptionally strong performance, positioning the company on track for what could be its best year yet.

From our DCF model, we estimated Meta's enterprise value at $1.209 billion, equity value at $1.230 billion, and an implied share price as of June 28, 2024, at $564.11, indicating an upside of 11.9%. The results of the sensitivity analysis further underscore Meta's robust financial positioning. In the bear case scenario, even under highly conservative assumptions, the implied share price was calculated at $505.51, still reflecting a modest 0.3% upside against the current stock price. This resilience in the face of potential market challenges speaks to Meta's solid fundamentals and the effectiveness of its strategic initiatives.

The bullish scenario, on the other hand, showcased the substantial growth potential if Meta's strategies in AI, digital advertising, and the metaverse continue to bear fruit, with an implied share price reaching as high as $644.66, representing a significant upside. These findings collectively highlight that Meta is well-positioned for continued growth despite the high CAPEX associated with its long-term projects. The conservative estimates showing an upside even in bearish conditions provide confidence that Meta's current trajectory offers attractive opportunities for investors. Therefore, this analysis strongly recommends a **buy** strategy, as Meta's strengths and future prospects outweigh the potential risks.

6. References

The Investopedia Team, 2024. *Why It's Important to Unlever the Beta When Making WACC Calculations.* [Online]
Available at: https://www.investopedia.com/ask/answers/102714/why-do-i-need-unlever-beta-when-making-wacc-calculations.asp
[Accessed 5 7 2024].

Adam Hayes, 2024. *Investopedia.* [Online]
Available at:
https://www.investopedia.com/terms/f/freecashflowfirm.asp#:~:text=Free%20cash%20flow%20to%20the%20firm%20(FCFF)%20represents%20the%20amount,after%20all%20expenses%20and%20reinvestments.
[Accessed 18 7 2024].

Chen, J., 2024. *What Is Market Risk Premium? Explanation and Use in Investing.* [Online]
Available at: https://www.investopedia.com/terms/m/marketriskpremium.asp
[Accessed 5 7 2024].

Damodaran, A., 2024. *Damodaran Online.* [Online]
Available at: https://pages.stern.nyu.edu/~adamodar/
[Accessed 5 7 2024].

Faria, G., 2023. *ECOM118 - Practical Valuation.* [Online]
Available at: https://qmplus.qmul.ac.uk/course/view.php?id=23433
[Accessed 2024].

Ganti, A., 2024. *Credit Spread: What It Means for Bonds and Options Strategy.* [Online]
Available at: https://www.investopedia.com/terms/c/creditspread.asp
[Accessed 5 7 2024].

Ganti, A., 2024. *Terminal Value (TV) Definition and How to Find the Value (With Formula).* [Online]
Available at:
https://www.investopedia.com/terms/t/terminalvalue.asp#:~:text=Terminal%20value%20(TV)%20is%20the,of%20the%20total%20assessed%20value.
[Accessed 7 7 2024].

Hayes, A., 2024. *Cost of Debt: What It Means and Formulas.* [Online]
Available at: https://www.investopedia.com/terms/c/costofdebt.asp
[Accessed 5 7 2024].

Hayes, A., 2024. *Free Cash Flow to the Firm (FCFF): Examples and Formulas.* [Online]
Available at:
https://www.investopedia.com/terms/f/freecashflowfirm.asp#:~:text=Free%20cash%20flo
w%20to%20the%20firm%20(FCFF)%20represents%20the%20amount,after%20all%20expen
ses%20and%20reinvestments.
[Accessed 12 7 2024].

International Monetary Fund, 2024. *Inflation rate, average consumer prices.* [Online]
Available at: https://www.imf.org/external/datamapper/PCPIPCH@WEO/USA
[Accessed 7 8 2024].

International Monetary Fund, 2024. *Real GDP growth.* [Online]
Available at: https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/USA
[Accessed 7 8 2024].

Investopedia, 2022. *Calculating Terminal Value: Perpetuity Growth Model vs. Exit Approach.*
[Online]
Available at: https://www.investopedia.com/ask/answers/060915/when-evaluating-
terminal-value-should-i-use-perpetuity-growth-model-or-exit-approach.asp
[Accessed 5 7 2024].

Investopedia, 2024. *Enterprise Value vs. Equity Value: What's the Difference?.* [Online]
Available at: https://www.investopedia.com/ask/answers/111414/what-difference-
between-enterprise-value-and-equity-value.asp
[Accessed 7 7 2024].

Julia Kagan, 2024. *Investopedia.* [Online]
Available at:
https://www.investopedia.com/terms/e/effectivetaxrate.asp#:~:text=The%20effective%20t
ax%20rate%20for%20a%20corporation%20is%20the%20average,legal%20percentage%20es
tablished%20by%20law.
[Accessed 5 7 2024].

Kan, M., 2024. *Zuckerberg's Meta Is Spending Billions to Buy 350,000 Nvidia H100 GPUs.*
[Online]
Available at: https://www.pcmag.com/news/zuckerbergs-meta-is-spending-billions-to-buy-
350000-nvidia-h100-gpus#:~:text=Graphics%20Cards-
,Zuckerberg's%20Meta%20Is%20Spending%20Billions%20to%20Buy%20350%2C000%20Nvi
dia%20H100,AI%2C%20says%20CEO%20Mark%20Zuckerberg.
[Accessed 4 8 2024].

Kenton, W., 2024. *investopedia.* [Online]
Available at:
https://www.investopedia.com/terms/c/costofequity.asp#:~:text=Cost%20of%20Equity%3F
-
,The%20cost%20of%20equity%20is%20the%20return%20that%20a%20company,to%20warr
ant%20the%20new%20initiative.
[Accessed 5 7 2024].

Kenton, W., 2024. *What Is Sensitivity Analysis?.* [Online]
Available at:
https://www.investopedia.com/terms/s/sensitivityanalysis.asp#:~:text=Sensitivity%20analy
sis%20is%20a%20financial,one%20variable%20affect%20the%20outcome.
[Accessed 21 7 2024].

Kramer, L., 2024. *Bull vs. Bear Markets: What's The Difference?.* [Online]
Available at: https://www.investopedia.com/insights/digging-deeper-bull-and-bear-
markets/
[Accessed 24 7 2024].

Leswing, K., 2024. *Facebook says Apple iOS privacy change will result in $10 billion revenue
hit this year.* [Online]
Available at: https://www.cnbc.com/2022/02/02/facebook-says-apple-ios-privacy-change-
will-cost-10-billion-this-year.html
[Accessed 23 7 2024].

Longtermtrends, 2024. *Bond Yield Credit Spreads.* [Online]
Available at: https://www.longtermtrends.net/bond-yield-credit-spreads/
[Accessed 15 7 2024].

Marshall Hargrave, 2024. *Investopedia.* [Online]
Available at: https://www.investopedia.com/terms/w/wacc.asp
[Accessed 5 7 2024].

Maverick, J., 2024. *Gross Profit Margin vs. Operating Profit Margin.* [Online]
Available at: https://www.investopedia.com/ask/answers/010815/what-difference-
between-gross-profit-margin-and-operating-profit-margin.asp
[Accessed 8 7 2024].

Meta, Inc., 2024. *Meta Investor Relations.* [Online]
Available at: https://investor.fb.com/financials/
[Accessed 12 8 2024].

Meta, Inc., 2024. *Meta Reports Fourth Quarter and Full Year 2023 Results; Initiates Quarterly Dividend.* [Online]
Available at: https://investor.fb.com/investor-news/press-release-details/2024/Meta-Reports-Fourth-Quarter-and-Full-Year-2023-Results-Initiates-Quarterly-Dividend/default.aspx#:~:text=Share%20repurchases%20%E2%80%93%20We%20repurchased%20%246.32,available%20and%20author
[Accessed 24 7 2024].

Moody's , 2024. *Rating Action.* [Online]
Available at: https://ratings.moodys.com/ratings-news/419044
[Accessed 5 7 2024].

Ross, S., 2024. *Default Risk vs. Credit Spread Risk.* [Online]
Available at: https://www.investopedia.com/ask/answers/022615/what-types-financial-situations-would-credit-spread-risk-be-applied-instead-default-risk.asp#:~:text=Default%20risk%20is%20measured%20by,have%20no%20guarantee%20of%20payment.
[Accessed 5 7 2024].

Ross, S., 2024. *Investopedia.* [Online]
Available at:
https://www.investopedia.com/ask/answers/06/amortizationvsdepreciation.asp
[Accessed 5 7 2024].

Segal, T., 2024. *How Effective Tax Rate Is Calculated From Income Statements.* [Online]
Available at: https://www.investopedia.com/ask/answers/102714/how-are-effective-tax-rates-calculated-income-statements.asp
[Accessed 8 7 2024].

Vanian, J., 2024. *Facebook scrambles to escape stock's death spiral as users flee, sales drop.* [Online]
Available at: https://www.cnbc.com/2022/09/30/facebook-scrambles-to-escape-death-spiral-as-users-flee-sales-drop.html
[Accessed 22 7 2024].

Woollacott, E., 2024. *Meta Faces Legal Complaints Over New AI Training Data Plans.* [Online]
Available at: https://www.forbes.com/sites/emmawoollacott/2024/06/10/meta-faces-legal-complaints-over-new-ai-training-data-plans/
[Accessed 14 8 2024].

Yahoo Finance, 2024. *CBOE Interest Rate 10 Year T No (^TNX).* [Online]
Available at: https://finance.yahoo.com/quote/%5ETNX/
[Accessed 5 7 2024].

Yahoo Finance, 2024. *Meta Platforms, Inc. (META).* [Online]
Available at: https://finance.yahoo.com/quote/META/key-statistics/
[Accessed 12 8 2024].

Yahoo Finance, N., 2024. *Yahoo Finance.* [Online]
Available at:
https://uk.finance.yahoo.com/quote/META/history/?period1=1719532800&period2=17241
12000&interval=1d&filter=history&frequency=1d&includeAdjustedClose=true
[Accessed 21 7 2024].

7. Appendices

Income Statement	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revenue	7,872	12,466	17,928	27,638	40,653	55,838	70,697	85,965	117,929	116,609	134,902
% growth		*58%*	*44%*	*54%*	*47%*	*37%*	*27%*	*22%*	*37%*	*(1%)*	*16%*
EBIT	3,803	7,207	10,001	16,494	20,202	24,913	23,986	32,671	46,753	28,944	46,751
% of sales	*48%*	*58%*	*56%*	*60%*	*50%*	*45%*	*34%*	*38%*	*40%*	*25%*	*35%*
Taxes	1,254	1,971	2,505	3,021	4,661	3,248	6,327	4,035	7,913	5,619	8,330
% of EBIT	*33%*	*27%*	*25%*	*18%*	*23%*	*13%*	*26%*	*12%*	*17%*	*19%*	*18%*

Cash Flow Items	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
D&A	1,011	1,243	1,945	2,342	3,025	4,315	5,741	6,862	7,967	8,686	11,178
% of sales	*13%*	*10%*	*11%*	*8%*	*7%*	*8%*	*8%*	*8%*	*7%*	*7%*	*8%*
% of CapEx	*74%*	*68%*	*77%*	*52%*	*45%*	*31%*	*38%*	*45%*	*43%*	*28%*	*41%*
Capital Expenditures	1,362	1,831	2,523	4,491	6,733	13,915	15,102	15,115	18,690	31,431	27,266
% of sales	*17%*	*15%*	*14%*	*16%*	*17%*	*25%*	*21%*	*18%*	*16%*	*27%*	*20%*
Change in Net Working Capital	676	-262	784	758	1,887	-1,527	7,250	-2,723	700	5683	3836
% of sales	*67%*	*(21%)*	*40%*	*32%*	*62%*	*(35%)*	*126%*	*(40%)*	*9%*	*65%*	*34%*
% of Change in Sales		*(6%)*	*14%*	*8%*	*14%*	*(10%)*	*49%*	*(18%)*	*2%*	*(431%)*	*21%*

APPENDIX 1: HISTORICAL FINANCIAL DATA AND PROFITABILITY RATIOS

DCF	2019	2020	2021	2022	2023	0 2024 E	1 2025 E	2 2026 E	3 2027 E	4 2028 E	5 2029 E
Revenue	70,697	85,965	117,929	116,609	134,902	161,882	189,564	218,188	246,553	273,427	297,489
% growth	27%	22%	37%	(1%)	16%	20%	17%	15%	13%	11%	9%
EBIT	23,986	32,671	46,753	28,944	46,751	63,134	75,826	89,457	103,552	117,574	130,895
% of sales	34%	38%	40%	25%	35%	39%	40%	41%	42%	43%	44%
Taxes	6,327	4,035	7,913	5,619	8,330	11,397	13,688	16,149	18,693	21,225	23,629
% of EBIT	26%	12%	17%	19%	18%	18%	18%	18%	18%	18%	18%
EBIAT						51,737	62,138	73,308	84,859	96,349	107,266
D&A	5,741	6,862	7,967	8,686	11,178	12,951	15,165	19,637	22,190	27,343	29,749
% of CapEx	38%	45%	43%	28%	41%	34%	34%	38%	38%	42%	42%
CapEx	15,102	15,115	18,690	31,431	27,266	38,500	45,084	51,891	58,637	65,028	70,751
% of sales	21%	18%	16%	27%	20%	24%	24%	24%	24%	24%	24%
Change in NWC	7,250	-2,723	700	5,685	3,876	2,158	2,215	2,290	2,269	2,150	1,925
% of Change in Sales	49%	(18%)	2%	(431%)	21%	8%	8%	8%	8%	8%	8%
Unlevered FCF						24,029	30,005	38,764	46,143	56,514	64,339

APPENDIX 2: PROJECTED FREE CASH FLOW

APPENDIX 3: BEAR CASE

						0	1	2	3	4	5
DCF	**2019**	**2020**	**2021**	**2022**	**2023**	**2024 E**	**2025 E**	**2026 E**	**2027 E**	**2028 E**	**2029 E**
Revenue	70,697	85,965	117,929	116,609	134,902	161,882	184,028	200,701	217,372	233,791	249,689
% growth	27%	22%	37%	(1%)	16%	20%	14%	9%	8%	8%	7%
Conservative Case						20%	14%	9%	8%	8%	7%
Base Case (Street)						20%	17%	15%	13%	11%	9%
EBIT	23,986	32,671	46,753	28,944	46,751	63,134	75,826	89,457	103,552	117,574	130,895
% of sales	34%	38%	40%	25%	35%	39%	36%	37%	38%	39%	40%
Conservative Case						39%	36%	37%	38%	39%	40%
Base Case (Street)						39%	40%	41%	42%	43%	44%
Taxes	6,327	4,035	7,913	5,619	8,330	11,397	13,688	16,149	18,693	21,225	23,629
% of EBIT	26%	12%	17%	19%	18%	18%	18%	18%	18%	18%	18%
EBIAT						51,737	62,138	73,308	84,859	96,349	107,266
D&A	5,741	6,862	7,967	8,686	11,178	12,951	15,165	19,637	22,190	27,343	29,749
% of CapEx	38%	45%	43%	28%	41%	32%	32%	36%	36%	40%	40%
Conservative Case						32%	32%	36%	36%	40%	40%
Base Case (Street)						34%	34%	38%	38%	42%	42%
CapEx	15,102	15,115	18,690	31,431	27,266	38,500	45,084	51,891	58,637	65,028	70,751
% of sales	21%	18%	16%	27%	20%	25%	25%	25%	25%	25%	25%
Conservative Case						25%	25%	25%	25%	25%	25%
Base Case (Street)						24%	24%	24%	24%	24%	24%
Change in NWC	7,250	-2,723	700	5,685	3,876	2,158	1,772	1,334	1,334	1,314	1,272
% of Change in Sales	49%	(18%)	2%	(431%)	21%	8%	8%	8%	8%	8%	8%
Unlevered FCF						24,029	30,448	39,720	47,078	57,350	64,992
Present Value of UFCF						23,758	28,500	34,063	36,988	41,281	42,859
Initial Discount Year						0.51					
Discount Period						0.25	0.75	1.75	2.75	3.75	4.75

Terminal Value	$	874,469
Present Value of Terminal Value	$	576,672
Enterprise Value	$	1,081,918
(+) Cash		58080
(-) Debt		37,991
Equity Value	$	1,102,007
Shares Outstanding		2,180
Implied Share Price	$	505.51

APPENDIX 4: BULL CASE

DCF	2019	2020	2021	2022	2023	0 2024 E	1 2025 E	2 2026 E	3 2027 E	4 2028 E	5 2029 E
Revenue	70,697	85,965	117,929	116,609	134,902	164,580	195,538	228,017	261,475	294,778	326,614
% growth	27%	22%	37%	(1%)	16%	22%	19%	17%	15%	13%	11%
Base Case (Street)						20%	17%	15%	13%	11%	9%
Optimistic Case						22%	19%	17%	15%	13%	11%
EBIT	23,986	32,671	46,753	28,944	46,751	63,134	75,826	89,457	103,552	117,574	130,895
% of sales	34%	38%	40%	25%	35%	39%	46%	47%	47%	48%	48%
Base Case (Street)						39%	40%	41%	42%	43%	44%
Optimistic Case						39%	46%	47%	47%	48%	48%
Taxes	6,327	4,035	7,913	5,619	8,330	11,397	13,688	16,149	18,693	21,225	23,629
% of EBIT	26%	12%	17%	19%	18%	18%	18%	18%	18%	18%	18%
EBIAT						51,737	62,138	73,308	84,859	96,349	107,266
D&A	5,741	6,862	7,967	8,686	11,178	12,951	15,165	19,637	22,190	27,343	29,749
% of CapEx	38%	45%	43%	28%	41%	37%	37%	42%	42%	46%	46%
Base Case (Street)						34%	34%	38%	38%	42%	42%
Optimistic Case						37%	37%	42%	42%	46%	46%
CapEx	15,102	15,115	18,690	31,431	27,266	38,500	45,084	51,891	58,637	65,028	70,751
% of sales	21%	18%	16%	27%	20%	20%	20%	20%	20%	20%	20%
Base Case (Street)						24%	24%	24%	24%	24%	24%
Optimistic Case						20%	20%	20%	20%	20%	20%
Change in NWC	7,250	-2,723	700	5,685	3,876	2,374	2,477	2,598	2,677	2,664	2,547
% of Change in Sales	49%	(18%)	2%	(431%)	21%	8%	8%	8%	8%	8%	8%
Unlevered FCF						23,813	29,743	38,456	45,735	55,999	63,717
Present Value of UFCF						23,572	28,035	33,516	36,855	41,726	43,898
Initial Discount Year						0.51					
Discount Period						0.25	0.75	1.75	2.75	3.75	4.75

Terminal Value	$	1,177,673
Present Value of Terminal Value	$	811,362
Enterprise Value	$	1,385,275
(+) Cash		58080
(-) Debt		37,991
Equity Value	$	1,405,364
Shares Outstanding		2,180
Implied Share Price	$	644.66