





COVER PAGE AND DECLARATION

	Master of Business Administration (M.B.A.)
Specialisation:	Project Management
Affiliated Center:	CEO
Module Code & Module Title:	MGT570 - Financial Management
Student's Full Name:	Ahmed Abdelhamid Ibrahim Elghazaly
Student ID:	EIU2021051
Word Count:	3537
Date of Submission:	13-04-2025

I confirm that this assignment is my own work, is not copied from any other person's work (published/unpublished), and has not been previously submitted for assessment elsewhere.

E-SIGNATURE:	Ahmed Abdelhamid Ibrahim Elghazaly
DATE:	13-04-2025
-	

EIU Paris City Campus

Address: 59 Rue Lamarck, 75018 Paris, France | Tel: +33 144 857 317 | Mobile/WhatsApp: +33607591197 | Email: paris@eiu.ac

EIU Corporate Strategy & Operations Headquarter

Contents

Introduction	2
1. Performance evaluation by analyzing the following performance measures	2
1.1. Balance Sheet Analysis	2
1.2. Income Statement	5
1.3. Cash Flow Statement Analysis	7
1.4. Liquidity Analysis	10
1.5. Profitability Analysis	11
1.6. Leverage Analysis	12
1.7. Market-based Analysis	13
1.8. Efficiency Analysis	14
2. Recommendations for Business Improvement	16
3. Recommended Investment Project: Advanced Packaging Facility	17
3.1. Weighted Average Cost of Capital (WACC) Analysis	18
3.2. Net Present Value Analysis (NPV)	19
4. Recommendation on Paying Dividends	20
Conclusion	21
References	21

Introduction

As a financial consultant, I have to analyse the financial statements and annual reports of Advanced Micro Devices Inc. (AMD) over the past four years (2020-2023). This analysis covers the following statement: balance sheet, income statement, and cash flow statement, going deeply into the analytics of the statements using the following measures: profitability, efficiency, short-term solvency, long-term solvency, and market-based ratios. In addition, suggest investment in new projects for the company and indicate whether it is a good idea to use NPV and WACC. Finally, we will decide where the company should pay return earnings or not.

1. Performance evaluation by analyzing the following performance measures

1.1. Balance Sheet Analysis

The Balance Sheet provides a snapshot of AMD financial position.

- **Total Assets** increased from \$8.9 billion in 2020 to \$67.9 billion in 2023, pushed by significant growth in current assets.
- **Total Liabilities** increased from \$3.1 billion in 2020 to \$11.9 billion in 2023, primarily due to raised long-term debt and expanded operational activities.
- **Shareholders Equity** grew from \$5.8 billion in 2020 to \$55.9 billion in 2023, reflecting strong operational performance.

The AMD expanded its asset base through strategic and organic growth. The increase in liabilities is proportionate to its growth initiatives, and the notable rise in shareholders equity indicates strong investor confidence and retained earnings.

Provided the Balance Sheet for the last four years (2020-2023) (Advanced Micro Devices I., 2023)

(Millions in USD)

Assets	2023	2022	2021	2020
Current assets:				
Cash and cash equivalents	3,933	4,835	2,535	1,595
Short-term investments	1,840	1,020	1,073	695
Accounts receivable, net	5,376	4,126	2,706	2,066
Inventories	4,351	3,771	1,955	1,399
Receivables from related parties	9	2	2	10
Prepaid expenses and other current assets	1,259	1,265	312	378
Total Current assets	16,768	15,019	8,583	6,143
Non-current assets:				
Property and equipment, net	1,589	1,513	702	641
Operating lease right-of-use assets	633	460	367	208
Goodwill	24,262	24,177	289	289
Acquisition-related intangibles	21,363	24,118	-	-
Investment equity method	99	83	69	63
Deferred tax assets	366	58	931	1,245
Other non-current assets	2,805	2,152	1,478	373
Total non-current assets	51,117	52,561	3,836	2,819
Total Asset	67,885	67,580	12,419	8,962
Total Asset Liabilities	67,885	67,580	12,419	8,962
	67,885	67,580	12,419	8,962
Liabilities Current liabilities:	2,055	,	,	8,962 468
Liabilities	,	2,493 463	12,419 1,321 85	
Liabilities Current liabilities: Accounts payable	2,055	2,493	1,321	468
Liabilities Current liabilities: Accounts payable Payables to related parties	2,055 363	2,493 463	1,321 85	468 78
Liabilities Current liabilities: Accounts payable Payables to related parties Accrued liabilities	2,055 363 3,082	2,493 463 3,077	1,321 85 2,424	468 78 1,796
Liabilities Current liabilities: Accounts payable Payables to related parties Accrued liabilities Current portion of long-term debt, net	2,055 363 3,082 751	2,493 463 3,077	1,321 85 2,424 312	468 78 1,796
Liabilities Current liabilities: Accounts payable Payables to related parties Accrued liabilities Current portion of long-term debt, net Other current liabilities	2,055 363 3,082 751 438	2,493 463 3,077 - 336	1,321 85 2,424 312 98	468 78 1,796 - 75
Liabilities Current liabilities: Accounts payable Payables to related parties Accrued liabilities Current portion of long-term debt, net Other current liabilities Total current liabilities	2,055 363 3,082 751 438	2,493 463 3,077 - 336	1,321 85 2,424 312 98	468 78 1,796 - 75
Liabilities Current liabilities: Accounts payable Payables to related parties Accrued liabilities Current portion of long-term debt, net Other current liabilities Total current liabilities long-term liabilities:	2,055 363 3,082 751 438 6,689	2,493 463 3,077 - 336 6,369	1,321 85 2,424 312 98 4,240	468 78 1,796 - 75 2,417
Liabilities Current liabilities: Accounts payable Payables to related parties Accrued liabilities Current portion of long-term debt, net Other current liabilities Total current liabilities long-term liabilities: Long-term debt, net of current portion	2,055 363 3,082 751 438 6,689	2,493 463 3,077 - 336 6,369	1,321 85 2,424 312 98 4,240	468 78 1,796 - 75 2,417
Current liabilities: Accounts payable Payables to related parties Accrued liabilities Current portion of long-term debt, net Other current liabilities Total current liabilities long-term liabilities: Long-term debt, net of current portion Long-term operating lease liabilities	2,055 363 3,082 751 438 6,689	2,493 463 3,077 - 336 6,369 2,467 396	1,321 85 2,424 312 98 4,240	468 78 1,796 - 75 2,417
Current liabilities: Accounts payable Payables to related parties Accrued liabilities Current portion of long-term debt, net Other current liabilities Total current liabilities long-term liabilities: Long-term debt, net of current portion Long-term operating lease liabilities Deferred tax liabilities	2,055 363 3,082 751 438 6,689 1,717 535 1,202	2,493 463 3,077 - 336 6,369 2,467 396 1,934	1,321 85 2,424 312 98 4,240 1 348	468 78 1,796 - 75 2,417 330 201

Stockholders' equity	2023	2022	2021	2020
Capital stock:				
Common stock, par value	17	16	12	12
Additional paid-in capital	59,676	58,005	11,069	10,544
Treasury stock, at cost	(4,514)	(3,099)	(2,130)	(131)
Retained earnings (Accumulated deficit)	723	(131)	(1,451)	(4,605)
Comprehensive Income & Other	(10)	(41)	(3)	17
Total Stockholders' equity	55,892	54,750	7,497	5,837
Total Liabilities & Equity	67,885	67,580	12,419	8,962
Important Figures				
Total Debt	3,003	2,863	661	531
Net Cash (Debt)	2,664	2,992	2,947	1,759
Net Cash Per Share	1.64	1.90	2.40	1.46
Filing Date Shares Outstanding	1,616	1,611	1,199	1,211
Total Common Shares Outstanding	1,616	1,612	1,207	1,211
Working Capital	10,079	8,650	4,343	3,726
Book Value Per Share	34.59	33.96	6.21	4.82
Tangible Book Value	10,267	6,455	6,885	5,319
Tangible Book Value Per Share	6.35	4.00	5.70	4.39

1.2. Income Statement

AMD's earnings for the period are shown in the Income Statement.

- Revenue increased significantly from \$9.76 billion in 2020 to \$22.68 billion in 2023,
 mostly due to the high demand for data center, CPU, and GPU products.
- From \$1.36 billion in 2020 to \$401 million in 2023, operating income fell.
- In 2023, net income was \$854 million, down from \$2.49 billion in 2020.

Significant operational challenges are indicated by AMD's impressive sales as well as its declining net income and operating income.

Provided the Income Statement for the last four years (2020-2023) (Millions in USD)

Income Statement	2023	2022	2021	2020
Net revenue	22,680	23,601	16,434	9,763
Cost of sales	(12,220)	(12,998)	(8,505)	(5,416)
Gross profit	10,460	10,603	7,929	4,347
Research and development	(5,872)	(5,005)	(2,845)	(1,983)
Marketing, general and administrative	(2,352)	(2,336)	(1,448)	(995)
Amortization of acquisition-related intangibles	(1,869)	(2,100)	-	-
Licensing gain	34	102	12	-
Operating income	401	1,264	3,648	1,369
Interest expense	(106)	(88)	(34)	(47)
Interest income	206	65	8	8
Loss on debt redemption, repurchase and conversion	-	-	(7)	(54)
Gains (losses) on equity investments, net	(1)	(62)	56	2
Other income (expense)	(8)	5	(2)	(3)
EBT Excluding Unusual Items	509	1,260	3,626	1,332
Gain (Loss) on Sale of Investments	(1)	(62)	56	2
Other Unusual Items	_	-	(7)	(54)
Pretax Income	508	1,198	3,675	1,280
Income tax (provision) benefit	346	122	(513)	1,210
Net income	854	1,320	3,162	2,490

Shares Outstanding (Basic)	1,614	1,561	1,213	1,184
Shares Outstanding (Diluted)	1,625	1,571	1,229	1,207
Earnings per share (Basic)	0.53	0.85	2.61	0.53
Earnings per share (Diluted)	0.53	0.84	2.57	0.53

1.3. Cash Flow Statement Analysis

A cash flow statement shows the cash inflows and cash outflows of AMD.

- Operating Cash Flow: Increased from \$1.07 billion in 2019 to \$1.66 billion in 2023, reflecting robust cash generation from core operations.
- **Investing Cash Flow:** Net cash used in investing activities averaged around \$1.26 billion per year, primarily for acquisitions and capital expenditures.
- **Financing Cash Flow:** AMD consistently maintained a conservative financing strategy with minimal debt issuance and strong equity management.

Provided the Cash Flow for the last four years (2020-2023) (Millions in USD)

Operating Activities	2023	2022	2021	2020
Net Income	854	1,320	3,162	2,490
Depreciation & Amortization	3,453	4,174	407	312
Stock-Based Compensation	1,384	1,081	379	274
Amortization of operating lease right-of-use	98	88	56	42
assets				
Amortization of inventory fair value adjustment	3	189	-	-
Amortization of debt discount and issuance costs	-	-	5	14
Loss on debt redemption, repurchase and	-	-	7	54
conversion				
Loss on sale or disposal of property and equipment	11	16	34	33
Deferred income taxes	(1,019)	(1,505)	308	(1,223)
(Gains) losses on equity investments, net	(1)	62	(56)	(2)
Accounts receivable, net	(1,250)	(1,091)	(640)	(219)
Inventories	(580)	(1,401)	(556)	(417)
Receivables from related parties	(7)	(13)	8	10
Prepaid expenses and other assets	(472)	(1,197)	(920)	(231)
Payables to related parties	(100)	379	7	(135)
Accounts payable	(419)	931	801	(513)
Accrued liabilities and other	(221)	546	526	574
Operating Cash Flow	1,667	3,565	3,521	1,071
Investing Activities				
Capital Expenditures	(546)	(450)	(301)	(294)
Cash Acquisitions	(131)	822	-	-
Investment in Securities	(746)	1,638	(378)	(658)
Other Investing Activities	-	(11)	(7)	-

Investing Cash Flow	(1,423)	1,999	(686)	(952)
Financing Activities				
Long-Term Debt Issued	-	991	-	200
Total Debt Issued	-	991	-	200
Long-Term Debt Repaid	-	(312)	-	(200)
Total Debt Repaid	-	(312)	-	(200)
Net Debt Issued (Repaid)	-	679	-	-
Issuance of Common Stock	268	167	104	85
Repurchase of Common Stock	(1,412)	(4,108)	(1,999)	(78)
Other Financing Activities	(2)	(2)	-	(1)
Financing Cash Flow	(1,146)	(3,264)	(1,895)	6
Net increase (decrease) in cash and cash equivalents	(902)	2,300	940	125
Cash and cash equivalents at beginning of period	4,835	2,535	1,595	1,470
Cash and cash equivalents at end of period	3,933	4,835	2,535	1,595

Important Figures	2023	2022	2021	2020
Market Capitalization	238,141	104,432	176,480	110,546
Revenue	22,680	23,601	16,434	9,763
Depreciation and amortization	3,453	4,174	407	312
EBIT	401	1,264	3,648	1,369
EBITDA	3,854	5,438	4,055	1,681
Gross Profit	10,460	10,603	7,929	4,347
Operating Income	401	1,264	3,648	1,369
Net Income	854	1,320	3,162	2,490
Gross Margin	46%	45%	48%	45%
(Gross Profit / Revenue) * 100%				
Operating Margin	1.77%	5.36%	22.20%	14.02%
(Operating Income / Revenue) * 100%				
Profit Margin	3.77%	5.59%	19.24%	25.50%
(Net Income / Revenue) * 100%				
EBITDA Margin	16.99%	23.04%	24.67%	17.22%
Net Income + Interest + Taxes + Depreciation and Amortization				
EBIT Margin	1.77%	5.36%	22.20%	14.02%

1.4. Liquidity Analysis

Liquidity measures AMD's ability to meet short-term liabilities.

AMD's liquidity ratios indicate a strong ability to meet short-term liabilities, with improvements in cash and quick ratios over the years, However, the fluctuations highlight the dynamic nature of its business and the challenge of maintaining short-term finances.

Liquidity	2023	2022	2021	2020
Current Ratio	2.51	2.36	2.02	2.54
Current Assets / Current Liabilities				
Quick Ratio	1.67	1.57	1.49	1.81
(Cash + Short-Term Investments + Accounts				
Receivable) / Current Liabilities				
Cash Ratio	0.86	0.92	0.85	0.95

Cash + Short-term investments / Current liabilities

The semiconductor industry is cyclical, and fluctuations in demand can significantly impact a company's liquidity.

The current ratio has shown variability across these years. This indicates that AMD's short-term liquidity position has shifted.

AMD's investments in research and development, as well as acquisitions (such as the Xilinx acquisition), can impact its cash reserves. These investments are essential for long-term growth but can strain short-term liquidity and it is important to take into account the large investments that AMD is making into AI technologies, and the impact that those investments have on the company's cash flow.

1.5. Profitability Analysis

Profitability assesses AMD's ability to generate profits.

Upon reviewing Advanced Micro Devices Inc.'s (AMD) profitability from 2020 to 2023, the following key metrics have been observed:

Profitability	2023	2022	2021	2020
Gross Profit Margin	46%	45%	48%	45%
(Gross Profit / Revenue) * 100%				
Operating Profit Margin	1.77%	5.36%	22.20%	14.02%
(Operating Income / Revenue) * 100%				
Net Profit Margin	3.77%	5.59%	19.24%	25.50%
(Net Income / Revenue) * 100%				
Return on Assets (ROA)	1.26%	1.95%	25.46%	27.78%
(Net income / Total assets) * 100				
Return on equity (ROE)	1.53	2.41	42.18	42.67
•				

(Net income / Total equity) * 100

- **Gross Profit Margin:** As for the gross profit margin, it remained stable over a four-year period between 45% and 46%.
- **Net Profit Margin:** decreased from 25.50% in 2020 to 3.77% in 2023, which indicates reduced profitability versus revenue.
- **Return on Assets (ROA):** ROA decreased significantly from 27.78% in 2020 to 1.26% in 2023, showing a decline in efficiency in utilizing assets to generate profits.
- **Return on Equity (ROE):** ROE also showed a drop from 42.67% in 2020 to 1.53% in 2023, reflecting diminished returns for shareholders.

These trends indicate that while AMD maintained its gross profit margins, its overall profitability and efficiency in generating returns have declined over the period.

1.6. Leverage Analysis

Leverage evaluates AMD's use of debt in its capital structure.

AMD has effectively maintained a low-leverage capital structure, minimizing financial risks while maximizing equity growth.

Leverage / long-term Solvency	2023	2022	2021	2020	
Debt to equity ratio					
Total Debt / Total Equity	0.05	0.05	0.09	0.09	
Total debt ratio	0.18	0.19	0.40	0.35	
Total Asset – Total Equity / Total Asset					
Financial Leverage	1.21	1.23	1.66	1.54	
Total Asset / Total Equity					
Interest coverage	3.78	14.46	107.29	29.13	

EBIT / Interest expense

- **Debt to Equity Ratio:** Since 2020, AMD seems to have pursued a cautiously subdued debt strategy as evidenced from its stable Debt Equity Ratio at average of 0.06.
- **Interest Coverage Ratio:** Displaying considerable variability, the interest coverage ratio peaked at 107.29 in 2021, strongly demonstrating AMD's ability to service its interest throughout that year.

However, the ratio descended to 14.46 in 2022 and further to an understated 3.78 in 2023, indicating a reduced capacity to meet interest expenses, albeit still within the bounds of sufficient coverage.

Overall, AMD has effectively managed its financial leverage, maintained low debt levels and ensured sufficient earnings to cover interest obligations.

1.7. Market-based Analysis

Analysing AMD market-based ratios from 2020 to 2023 provides insight into the company's valuation and market performance. Below is a summary of key metrics.

Market-based	2023	2022	2021	2020			
Price-to-Earnings (P/E) Ratio	278.85	79.12	55.81	44.40			
Market Cap / Net Income							
price-to-sales (P/S) Ratio	10.50	4.42	10.74	11.32			
Market Capitalization / Revenue							
Price-to-Book (P/B) Ratio	4.26	1.91	23.54	18.94			

Market Capitalization / Shareholders' Equity

P/E Ratio: The significant increase in the P/E ratio from 44.40 in 2020 to 278.85 in 2023 showing that investors have higher expectations for AMD's future earnings growth. However, such a high P/E ratio may also indicate overvaluation.

P/S Ratio: The P/S ratio decreased from 11.32 in 2020 to 4.42 in 2022, indicating a more attractive valuation relative to sales during that period. The increase to 10.50 in 2023 showing a higher valuation relative to revenue.

P/B Ratio: The P/B ratio peaked at 23.54 in 2021 and dropped to 1.91 in 2022, reflecting changes in market valuation relative to the company's net assets. The increase to 4.26 in 2023 indicates a higher valuation of AMD's net assets.

1.8. Efficiency Analysis

Efficiency ratios assess how well AMD utilizes its assets to generate revenue.

Asset Turnover Ratio: Declined from 1.30 in 2020 to 0.33 in 2023. Indicates AMD is generating less revenue per dollar of assets, possibly due to increased investments in long-term assets.

Inventory Turnover Ratio: Dropped from 4.35 in 2021 to 2.80 in 2023. Slower inventory movement, which indicate weaker demand or excess stock.

Accounts Receivable Turnover Ratio: Decreased from 6.07 in 2021 to 4.21 in 2023. Shows a decline in how quickly AMD collects payments from customers, which could affect cash flow.

Working Capital Turnover Ratio: Improved from 2.62 in 2020 to 3.78 in 2021, indicating better efficiency in utilizing working capital to drive revenue growth. The ratio dropped to 2.25 in 2023, showing that AMD's revenue generation from working capital has slightly weakened, possibly due to higher current assets. AMD maintained positive working capital throughout 2020-2023, signifying good short-term financial health and liquidity.

Below is a summary of key metrics.

Efficiency Analysis	2023	2022	2021	2020			
Asset Turnover Ratio	0.33	0.59	1.54	1.30			
Revenue / Total Assets							
Inventory Turnover Ratio	2.80	3.44	4.35	3.87			
Cost of sales / Inventories							
Inventory Days on Hand	130 Days	106 Days	84 Days	94 Days			
365 / Inventory Turnover Rat	Days	Days	Days	Days			
Accounts Receivable Turnover Ratio	4.21	5.72	6.07	4.725			
Revenue / Accounts Receivable, net							
Accounts Receivable Days on Hand	87	64	60	77			
365 / Accounts Receivable Turnover Rat	Days	Days	Days	Days			
Accounts Payable Turnover Ratio	11.03	9.46	12.44	20.86			
Revenue / Accounts Payable							
Accounts Payable Days on Hand	33	39	29	18			
Accounts I ayable Days on Hand	Day	Day	Day	Day			
365 / Accounts Payable Turnover Rat							
Working Capital Turnover Ratio	2.25	2.72	3.78	2.62			
Revenue / Working Capital							
Cash-In-flow / Operating Cycle	217 Days	170 Days	144 Days	171 Days			
T . B . T . 1 . A B 11							

Inventory Days on Hand + Accounts Receivable Days on Hand

As per the numbers the Cash-In-flow greater than the Accounts Payable Days, and they could have overdraft gaps / Cash Conversion to pay the Accounts Payable.

In-addition the Cash-In-flow fluctuate between 144 and 217 days showing big challenge on market demands.

2. Recommendations for Business Improvement

AMD has demonstrated strong revenue growth and financial stability but faces challenges in profitability and efficiency. Focusing on cost management, asset utilization, and investor confidence should keep AMD healthy financially and keep it competitive in the long term.

By analyzing the AMD financial statements and PC market:

The Xilinx acquisition impacted AMD's financial statements, especially in terms of debt, assets, and operating expenses.

Market fluctuations in the semiconductor industry and changes in demand have played a significant role in AMD's performance.

The PC market downturn, and the general economic conditions of 2023, impacted AMD's financial health.

AMD has made large investments into AI related technologies, and these investments will impact future financial reports.

Recommendations for Improving the Company Business

Debt Management: Focus on reducing debt levels to mitigate financial risk, particularly following the Xilinx acquisition. and explore strategies for optimizing capital structure.

Operational Efficiency: Improve the gross margin by optimizing costs with different pricing strategies. In addition, inventory should be improved to minimize holding costs while maximizing turnover.

Diversification and Market Expansion: Keep diversifying product sets and penetrating new markets like data centers and AI solutions to move away from too few segments. Take advantage of the growing market in AI so that the big money spent will pay off.

R&D Investment: Strong commitment toward research and development, as fuel for innovation in future.

Cost Control: In times of market downturns, strict cost control is essential. AMD should analyze all areas of spending, and cut any unneeded expenses.

Market Analysis: Continuous market analysis is needed. The semiconductor market is highly volatile, and AMD must be able to quickly react to changes in the market.

By focusing on these recommendations, AMD can strengthen its financial position and capitalize on growth opportunities in the dynamic semiconductor industry.

3. Recommended Investment Project: Advanced Packaging Facility

AMD is considering expanding its AI-powered semiconductor development with an estimated initial investment of \$15 billion. The company can finance 40% of the project with its own capital and the remainder with external funding.

AMD invests in building a state-of-the-art advanced packaging facility. This facility would specialize in 2.5D and 3D chipset integration, a critical area for high-performance computing (HPC), AI, and data center applications.

Advanced packaging is essential for AMD to develop more sophisticated and potent chips.

The rapidly increasing demand for data center, AI, and HPC solutions is driving the need for advanced packaging capabilities.

An edge over competitors.

AMD stands to gain because a state-of-the-art packaging facility would lead to greater supply chain control with limited dependence on foundries outside its ecosystem.

This investment would open for AMD the growing complexity in chip design and the requirement for heterogeneous integration.

3.1. Weighted Average Cost of Capital (WACC) Analysis

Assumptions:

Initial Investment	\$15 Billion
Equity	40%
Debt	60%
Project Life	5 years
Cost of Debt (Rd)	5%
Current risk-free rate	4.32%
Beta Value	1.26
Market Premium	6%
Tax Rate (T)	21%

• Cost of Equity (Re)

Using Capital Asset Pricing Model (CAPM) to calculate the required rate of return. The formula is:

Cost of Equity = Risk-Free Rate of Return + Beta of Asset * (Market Premium) $\mathbf{Re} = 4.32\% + 1.26 * 6\% = 11.88\%$

• After-Tax Cost of Debt (ATRd)

After-tax cost of debt = Rd * (1 - Tax Rate) = 0.05 * (1-0.21) = 0.0395

• Weighted Average Cost of Capital (WACC)

- o Equity Weight (E/V): 40% = 0.4
- o Debt Weight (D/V): 60% = 0.6
- \circ WACC = (E/V) * Re + (D/V) * ATRd
- \circ WACC = (0.4 * 0.1188) + (0.6 * 0.0395)
- \circ WACC = 0.04752 + 0.0237
- \circ WACC = 0.07122 = 7.122%

3.2 Net Present Value Analysis (NPV)

calculate the NPV for this project for the next 5 years using (Free Cach flow) FCF.

Revenue (Year n) = Revenue (Year n-1) * (1 + Growth Rate)

Free Cach flow (FCF) = NOPAT + Depreciation & Amortization - CapEx - Changes in Working Capital.

Net Operating Profit After Taxes (NOPAT) = EBIT – Taxes.

Project Capital Expenditures (CapEx) = investments in fixed assets.

Taxes: EBIT * Tax Rate.

NOPAT: EBIT - Taxes.

Assumptions:

• Revenue Growth

Year	Revenue Growth
1	20%
2	18%
3	15%
4	12%
5	10%

• Operating Margin: 60% of Revenue

• Tax Rate: 21%

• Depreciation & Amortization: 10% of Revenue

• Capital Expenditures (CapEx): 60% of initial investment for first year.

• Working Capital: 40% of initial investment for first year.

• Changes in Working Capital: 20% of Revenue after the first years.

• Revenue for current year: 22,680 billion.

Values in Millions

Year	Revenue	EBIT	Taxes	NOPAT	Depr. & Amort.	CapEx	Change in WC	FCF
1	29484	17690.4	3714.98	13975.42	2948.4	9000	6000	1923.816
2	37444.68	22466.81	4718.03	17748.78	3744.46	0	7488.93	14004.31
3	46431.4	27858.84	5850.35	22008.49	4643.14	0	9286.28	17365.34
4	56182	33709.2	7078.93	26630.27	5618.2	0	11236.4	21012.07
5	66294.76	39776.85	8353.13	31423.72	6629.47	0	13258.95	24794.24

NPV for next 5 years

NPV = FCF / (1+WACC) - Initial Investment

WACC = 7.12

Year	FCF	(1+ WACC)	NPV	Net selvage value
1	1923.81	8.12	236.92	0
2	14004.31	65.93	212.41	0
3	17365.34	535.38	32.43	0
4	21012.07	4,347.34	4.83	0
5	24794.24	35,300.44	0.702	4500 + 13258.95

Expected selling for project machinery is \$4500.

And the final WC is \$13258.95.

Total NPV for the 5 Years and after Net selvage value = 18246.20

NPV is positive, indicating the project is financially viable.

- AMD should use retained earnings rather than cash reserves to finance its share of the investment to maintain liquidity.
- The remaining \$9000 billion should be financed through debt or equity issuance.

4. Recommendation on Paying Dividends

Net profit margins and ROE decline from 2021 to 2023, so AMD needs to keep earnings instead of paying dividends in the short term. Instead, retained earnings can be allocated toward high-growth investments in AI semiconductors, research and development projects, and market penetration efforts expected to yield better long-term shareholder returns.

Conclusion

In conclusion, AMD's financial performance over the past four years reflects a company that is growing robustly, managing its resources efficiently, and maintaining strong liquidity and profitability. The balance sheet, income statement, and cash flow statement all point towards a positive trajectory for AMD, supported by sound financial management and strategic investments. The company's strong liquidity, balanced leverage, and high profitability ratios underscore its financial health and ability to sustain growth in the competitive semiconductor market (AMD, 2019-2022).

References

- Advanced Micro Devices, I. (2022, Dec 31). *Financial Results*. Retrieved from ir.amd.com: https://d1io3yog0oux5.cloudfront.net/_b6785e7df31152e1a59b5da74933e0b8/amd/db/778/6694/file/Q4+2021+GAAP+and+Non-GAAP+Earnings+Tables.pdf
- Advanced Micro Devices, I. (2023, Dec 30). *Financial Results*. Retrieved from AMD: https://dlio3yog0oux5.cloudfront.net/_b6785e7df31152e1a59b5da74933e0b8/amd/db/778/6947/file/Q4+and+Full+Year+2023+Gaap+and+Non-Gaap+Earnings+Tables.pdf
- gurufocus. (2025). *Advanced Micro Devices (BUE:AMD) WACC*. Retrieved from gurufocus.com: https://www.gurufocus.com/term/wacc/BUE:AMD
- Intelligence, S. G. (2025, Feb 5). *Advanced Micro Devices Income Statement*. Retrieved from stockanalysis.com: https://stockanalysis.com/stocks/amd/financials/
- Net, S. A. (2025). *Advanced Micro Devices Inc, Balance Sheet: Assets*. Retrieved from stock-analysis-on.net: https://www.stock-analysis-on.net/NASDAQ/Company/Advanced-Micro-Devices-Inc/Financial-Statement/Assets