# FINDING THE RIGHT FIT: A DEEP DIVE INTO THE PUMA'S FINANCIAL HEALTH

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#### **ABSTRACT**

Puma has been making efforts to improve its sustainability practices and reduce its environmental impact, which has become an important issue for many consumers and investors. It has invested heavily in research and development to stay competitive in the highly competitive athletic apparel industry. Overall, Puma's financial performance and its commitment to sustainability make it a compelling company to study and analyse.

Financial statement analysis tools are used to examine non-financial factors that may impact the company's financial performance, such as management quality, industry trends, and economic conditions. The financial statement shows that Puma has experienced strong revenue growth in recent years, driven by successful product launches and expansion into new markets. The company has also maintained strong profitability, with healthy gross and net margins.

This research provides valuable insights into Puma's financial health and performance, allowing investors and analysts to make informed decisions about their investments.

All the financial values mentioned hereafter are in millions of euros.

**Key Terms:** Vertical and Horizontal analysis, Sustainability, Cost of goods sold (COGS), Liquidity, Solvency, Financial forecasting, Cash flow, Earnings per share (EPS), Debt-to-Equity ratio

#### INTRODUCTION

Puma is a German multinational company that specializes in the manufacturing and marketing of athletic and casual footwear, apparel, and accessories. Founded in 1948, the company has grown to become one of the world's leading sports brands, with a presence in over 120 countries.

This research paper aims to conduct a comprehensive financial analysis of Puma, with a focus on its financial performance over the period (2017-2021). The study will use various financial ratios, including profitability, liquidity, and solvency ratios, to assess the company's financial health and performance.

The research paper will conclude with an analysis of Puma's competitive landscape and growth prospects. The study will explore its strategic initiatives and plans for future growth.

#### LITERATURE REVIEW

Rohit Choudhary (2020) Analysing and comparing the impact of online and offline marketing strategies in generating customer retention and attraction- A closer study over Puma, UK. By analysing the marketing strategies of PUMA, the study sought to understand the role that online and offline marketing tactics have in boosting customer retention and drawing in new customers. 75 people participated in the survey, and two functional managers, two frontline managers, and one general manager of Puma were interviewed.

Md. Akter Hossain (2012) A comprehensive financial analysis of That's It sportswear Ltd. The research is about That's it sportswear Ltd, a major garments manufacturing organization in Bangladesh that is a sister concern of Hameem Group. The research focuses on the organization's efforts to reduce its rejection and rework rates, ensure product quality and delivery time, and increase profitability through sufficient training and suitable work for employees.

Anupa Jayawardhana (2016) Financial Performance Analysis of Adidas AG. With an emphasis on the balance sheet, income statement, and cash flow statement, this study examines Adidas' financial statements. In order to assess the company's financial performance for the years 2013 and 2014, the researcher used a variety of financial analysis methodologies, including trend analysis, ratio analysis, horizontal analysis, and vertical analysis. To find trends, the company's performance during the previous five years, beginning in 2010, has also been compared. The researcher has offered recommendations and ideas for boosting the company's revenue, lowering liabilities, and enhancing its stability based on the analysis.

**Dr. L.Nithya & Divya Dharshini (2018)** The study focuses on analyzing the financial performance of the selected textile industry and predicting the trend value. The study also highlights the importance of the textile sector in terms of employment generation, industrial development, and social and economic benefits. The results of the study can benefit shareholders, investors, policymakers, managers, researchers, and anyone involved in financial decision making related to the Indian textile industry.

Minghan Chen (2020) Financial performance analysis: a case study of Nike. This research is about a financial performance analysis of the sports industry with a case study of Nike. The study examines Nike's financial statements and uses various methods such as horizontal analysis, trend analysis, and ratio analysis to suggest improvements to increase cash flow, increase stock dividends, and reduce debts. The research also includes a comparison of Nike with its biggest market competitor Adidas.

Xuqing Liu (2021) NIKE's General Company Analysis Based on Its 2020 Annual Report. It assesses Nike's 2020 financial performance, which was significantly influenced by the COVID-19 epidemic. Nike is a well-known sports brand. The company's strengths, weaknesses, possibilities, and dangers are examined in the paper, which also utilises Nike as an illustration to show how the sports sector has evolved and followed trends, particularly in the move towards online digital services. The article also seeks to offer analysis and suggestions for the sports industry's future business advancement.

**A.S.M. Riazul, Haider (2011)** The research is about the financial analysis and performance of Apex Adelchi Footwear Limited, a leading manufacturer and exporter of leather footwear from Bangladesh. The

report covers various aspects including the company's mission, values, products, and financial issues. It also includes practical observations and experiences at the company's head office.

Mark Hecox, Sport Licensing and Internationalization: A Case Analysis of the Reebok Bike Business.

This case study analyses Reebok's decision to enter the bike industry after a 15-year strategic re-tooling process. The study looks at a number of variables, including internal and external variables that could affect a company's internationalisation process. The examination focuses on a number of marketing components, including operational model, pricing, distribution channel, and operating model. For Reebok to effectively enter the global bike sector, licencing and finding potential alliance partners are key decision-making processes in this case study. The examination also looks at many aspects of internationalization, including the supply chain, cultural influences, mode of entrance, operational model, and licencing strategy for alliance partners. This case study sheds light on why and how a sport enterprise would desire to extend its business internationally by looking at the potential role of sport licencing in internationalisation procedures.

Shaista Alvi (2021), The Financial Contagion of Novel Corona Virus Sars-Cov-2 On Skechers U.S.A., Inc. The study is about the financial performance of SKECHERS U.S.A., INC before and after the COVID-19 outbreak. The purpose of the study is to conduct financial analysis to compare the financial years ending on December 31, 2017, December 31, 2019, and December 31, 2020 for the post-COVID-19 financial year. Secondary data for the study was gathered from the publicly available financial records, including the consolidated balance sheets, income statements, cash flows, and equity statements. The firm's capacity to satisfy its short-term financial obligations, impact on profitability, activity ratios, and solvency ratios were all assessed as part of the financial analysis using ratio analysis and trend analysis.

Mónica Sofia Duarte (2021) Inter-company Analysis and Comparison in the Shoes Industry. The thesis aims to compare the financial performance of shoes companies operating in Europe and America, including NIKE, GEOX, ASICS, and CARNIVAL. The analysis will use various techniques commonly used in intercompany comparison, starting with one-dimensional methods like ratio analysis and DuPont analysis, and then moving on to multi-dimensional methods like regular summation, rigorous deduction, scoring method, standardized multivariate, and sophisticated standardized multivariate methods. The objective of the thesis is to provide a comprehensive and realistic intercompany comparison, identifying the best-performing company or the absolute winner, and determining whether median-cost companies like NIKE and CARNIVAL or high-cost companies like ASICS and GEOX performed better in the selected intercompany comparison criteria. The thesis aims to provide coherent results that can help investors and other stakeholders make informed decisions about investing in these companies.

#### PROBLEM STATEMENT

Accessing the financial health and performance of Puma, and finding way in which it can maintain its competitiveness and achieve sustained growth in the face of increasing competition and economic uncertainty.

#### **OBJECTIVE**

The objective of this research paper is to conduct a comprehensive analysis of Puma's financial performance from 2017-2021. The study aims to achieve the following specific objectives:

- > To evaluate Puma's profitability over these years, using various profitability ratios, such as gross profit margin and net profit margin.
- > To assess Puma's liquidity position using ratios such as the current ratio, quick ratio, and cash position ratio.
- > To analyse Puma's long-term financial stability and ability to service its debt obligations using solvency ratios such as the debt-to-equity ratio, fixed asset ratio, proprietary ratio and capital gearing ratio.

#### METHODOLOGY

This research paper employs a comparative study approach to analyse Puma's financial performance for the period of 2017-2021. The study utilizes various financial analysis tools, including ratio analysis and comparative statement analysis, to evaluate the company's liquidity, solvency, profitability, and efficiency. The data for the analysis is sourced from Puma's annual reports and financial statements, as well as from industry reports and publications. The study also considers the impact of external factors, such as the COVID-19 pandemic, on the company's performance and the industry as a whole.

#### **ANALYSIS**

## 1. Solvency ratios

## 1.1. Current ratio

This ratio measures the ability of a company to pay its short-term debts using its current assets.

Current ratio = Current Assets/Current Liabilities

Year	2017	2018	2019	2020	2021
Current	1884.8	2192.8	2481.2	2,613.0	3489.8
assets					
Current	1056.5	1195.2	1558.9	1,872.8	2,164.5
liabilities					
Current	1.78	1.83	1.59	1.39	1.61
ratio					

As a general rule of thumb, a current ratio in the range of 1.5 to 2.0 is considered healthy. It can be concluded that Puma was able to maintain the same throughout these years.

# 1.2. <u>Liquid/Quick ratio</u>

It shows the company's ability to pay its short-term liabilities with its liquid assets.

Liquid ratio = Liquid Assets/Current Liabilities

Year	2017	2018	2019	2020	2021
Quick ratio	1.04	1.7	0.87	0.88	1.1

The standard liquid ratio is 1:1, which means that a firm should have equal liquid assets and current liabilities. The company has struggled in this aspect in the years 2019 and 2020, but the ratio increased from 0.88 to 1.1 in 2021.

## 1.3. <u>Cash position ratio</u>

It measures a company's ability to pay off its short-term liabilities using its cash and cash equivalents.

Cash Position Ratio = (Cash and Cash Equivalents) / (Total Current Liabilities)

Year	2017	2018	2019	2020	2021
Cash	0.39	0.38	0.332	0.35	0.35
position					
ratio					

## 1.4.<u>Debt-Equity ratio</u>

This ratio measures the proportion of a company's financing that comes from debt and equity.

Debt-Equity ratio = Total long-term debts/Shareholders' funds

Year	2017	2018	2019	2020	2021
Debt-	0.8	0.6	0.6	0.9	0.7
Equity					
ratio					

## 1.5. Fixed Asset ratio

It measures the proportion of a company's total assets that are tied up in fixed assets. It indicates the extent to which a company has invested in long-term assets such as property, plant, and equipment, and can be used to assess the company's ability to repay long-term debt.

## Fixed Asset Ratio = Fixed Assets / Total Assets

Year	2017	2018	2019	2020	2021
Fixed Asset	0.2	0.21	0.23	0.22	0.23
ratio					

## 1.6.Proprietary ratio

It measures the proportion of a company's total assets that are financed by its shareholders' equity. It indicates the extent to which a company is relying on external sources of financing, such as debt, to fund its operations. A higher proprietary ratio indicates that the company has a stronger equity base and is less reliant on external financing, which can be a positive indicator of financial health.

## Proprietary Ratio = Shareholders' Equity / Total Assets

Year	2017	2018	2019	2020	2021
Proprietary	0.74	0.71	0.74	0.71	0.74
ratio					

## 1.7. <u>Capital Gearing ratio</u>

It indicates the degree of leverage used by a company to finance its operations. A higher capital gearing ratio indicates a higher level of debt financing relative to equity financing, which can increase financial risk for the company.

Capital Gearing Ratio = Total Debt / Shareholders' Equity

Year	2017	2018	2019	2020	2021
Capital	0.21	0.27	0.26	0.30	0.36
Gearing					
ratio					

The trend of Puma's Cash Position Ratio shows that the company has been able to maintain a healthy cash position in relation to its short-term liabilities over the years. Increasing level of debt financing relative to equity financing can be seen. This indicates that the company is relying more on debt to finance its operations, which can increase financial risk. The trend of Puma's Fixed Asset Ratio shows that the proportion of the company's total assets that are tied up in fixed assets has been relatively stable over the years. In 2021, the Fixed Asset Ratio increased slightly to 0.23, indicating a higher proportion of the company's assets are invested in fixed assets. It is important to note that the appropriate level of fixed assets can vary widely by industry. This shows that the company has been able to maintain a relatively high level of equity financing, with the ratio fluctuating between 0.71 and 0.74 over the years. This indicates that Puma is relying less on external financing and has a strong equity base.

#### 2. Turnover ratios

# 2.1. Stock Turnover ratio

It measures how many times a company's inventory is sold and replaced over a specific period. It indicates how effectively a company is managing its inventory and generating sales from its stock. A higher stock turnover ratio is generally considered more favourable, as it suggests that the company is selling its inventory quickly and efficiently.

Stock Turnover Ratio = Cost of Goods Sold / Average Inventory

Year	2017	2018	2019	2020	2021
Stock	5.5	5.2	5.1	4.7	6.7
Turnover					
ratio					ļ

## 2.2. Debtors' Turnover ratio

Also known as Accounts Receivable Turnover Ratio, it is a ratio that measures how many times a company's accounts receivable are collected during a specific period. It indicates how effectively a company is managing its credit policy and collecting its receivables.

Debtors Turnover Ratio = Net Credit Sales / Average Accounts Receivable

Year	2017	2018	2019	2020	2021
Debtors'	7.9	8.0	9.0	7.8	12.4
Turnover					
ratio					

## 2.3. Creditors' Turnover ratio

It is also known as Accounts Payable Turnover Ratio, that measures how many times a company pays its accounts payable during a specific period. It indicates how effectively a company is managing its payment policy and paying its debts.

Creditors Turnover Ratio = Cost of Goods Sold / Average Accounts Payable

Year	2017	2018	2019	2020	2021
Creditors'	5.0	5.2	5.4	5.2	7.0
Turnover					
ratio					

# 2.4. Working Capital Turnover ratio

It measures how efficiently a company is using its working capital to generate revenue. It indicates how many times a company's working capital is turned over in a year.

Working Capital Turnover Ratio = Net Sales / Working Capital

Year	2017	2018	2019	2020	2021
Stock	3.3	3.7	4.2	3.4	4.3
Turnover					
ratio					

The ability to generate revenue from its working capital improved significantly in 2021, after a decline in 2020.

# 2.5. Capital Turnover ratio

It tells the efficiency of a company in generating sales from its capital investments. It indicates how well a company is using its total assets to generate revenue.

Capital Turnover Ratio = Net Sales / Total Assets

Year	2017	2018	2019	2020	2021
Capital	1.8	1.9	2.0	1.5	2.2
Turnover					
ratio					

The company's inventory turnover improved in 2021 after a decrease in 2020. However, the company's inventory turnover was relatively stable between 2017 and 2019. It can be seen that the company's ability to collect its receivables improved significantly in 2021, after a decline in 2020. It's capability to pay its accounts payable improved significantly in 2021, after a decline in 2020. Ability to pay its accounts payable was relatively stable between 2017 and 2019. Generating revenue from its capital investments was relatively stable between 2017 and 2019.

# 3. Profitability ratios (in %)

# 3.1. <u>Gross Profit ratio</u>

It measures the percentage of sales revenue that exceeds the cost of goods sold. It indicates how efficiently a company is managing its production and pricing strategies.

Gross Profit Ratio = (Gross Profit / Net Sales) x 100%

Year	2017	2018	2019	2020	2021
Gross	43.9	43.3	43.3	45.5	49.5
Profit					
ratio					

## 3.2. Net Profit ratio

It measures the percentage of sales revenue that remains after all expenses, including taxes and interest, have been deducted. It indicates how efficiently a company is managing its operations and profitability

Net Profit Ratio = (Net Profit / Net Sales) x 100%

Year	2017	2018	2019	2020	2021
Net Profit	3.3	4.0	4.8	2.2	5.5
ratio					

# 3.3. Operating Profit ratio

This ratio shows the percentage of sales revenue that remains after all operating expenses have been deducted but before interest and taxes have been deducted. It indicates how efficiently a company is generating profits from its core business operations.

Operating Profit Ratio = (Operating Profit / Net Sales) x 100%

Year	2017	2018	2019	2020	2021
Operating	5.7	6.8	7.3	1.9	8.4
Profit ratio					

## 3.4. Operating ratio

It measures the proportion of operating expenses to net sales revenue. It indicates the percentage of a company's sales that is required to cover its operating expenses.

Operating Ratio = (Operating Expenses / Net Sales)  $\times 100\%$ 

Year	2017	2018	2019	2020	2021
Operating	94.3	93.2	92.7	98.1	91.5
ratio					

## 3.5. ROI ratio

The profitability of an investment by comparing the net profit to the amount of capital invested can be calculated using this ratio.

ROI Ratio = (Net Profit / Capital Invested) x 100%

Year	2017	2018	2019	2020	2021
ROI ratio	4.5	6.2	7.7	1.6	8.7

#### 3.6. Net Profit ratio

The net profit ratio shows the percentage of sales that remain after all expenses, including taxes and interest, have been paid.

Net Profit Ratio = (Net Profit / Net Sales) x 100%

Year	2017	2018	2019	2020	2021
Net Profit	3.3	4.0	4.8	1.1	5.0
ratio					

# 3.7. Earnings per Share ratio

It measures the net profit attributable to each share of a company's common stock

EPS = (Net Profit - Preferred Dividends) / Weighted Average Number of Common Shares Outstanding

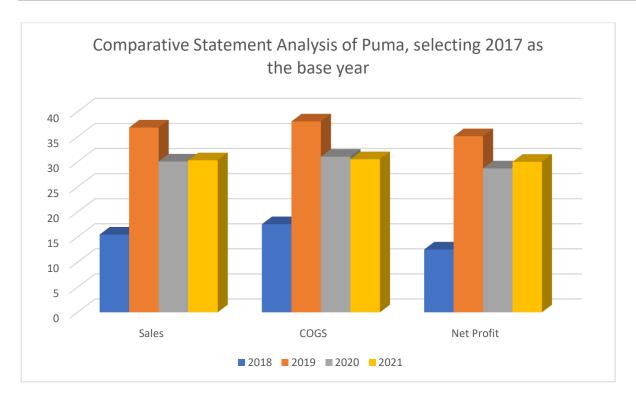
Year	2017	2018	2019	2020	2021
EPS ratio	2.37	3.24	4.53	0.78	5.46

The capability to generate a profit margin on its sales has been relatively stable between 2017 and 2019, with a slight increase in 2020 and a significant increase in 2021. This suggests that the company has been successful in managing its production costs and pricing strategies. Profits from its core business operations has been relatively stable between 2017 and 2019, with a significant decrease in 2020 and a significant increase in 2021. This shows that it has been able to manage its operating expenses and generate higher profits from its core business activities in 2021.

## **Comparative Statement Analysis**

A comparative statement analysis, also known as a horizontal analysis, compares the financial statements of a company over several periods to identify trends and changes in the company's financial performance over time. Comparative statement analysis of Puma (2017-2021) is analysed below:

			(%		(%		(%		(%
Particulars	2017	2018	change)	2019	change)	2020	change)	2021	change)
Sales	4024.4	4648.3	15.50	5507.5	36.85	5234.6	30.07	5244.5	30.31
Cost of									
Goods									
Sold									
(COGS)	2373.1	2790.2	17.57	3276.4	38.06	3109.4	31.02	3097.6	30.52
Net Profit	1651.3	1858.1	12.52	2231.1	35.11	2125.2	28.69	2146.9	30.01



Puma's sales have been increasing steadily from 2017-2019, but then declined in 2020 due to the impact of the COVID-19 pandemic. However, in 2021, the company was able to recover and achieve a slight increase in sales compared to the previous year.

The cost of goods sold (COGS) has also been increasing with sales, except in 2020 where there was a slight decrease. This led to a decrease in gross profit in 2020 compared to the previous year. However, in 2021, there was an increase in gross profit due to a slight decrease in COGS and an increase in sales.

Puma's net profit has been volatile over the years, with a significant increase in 2019, followed by a sharp decline in 2020. However, in 2021, the company was able to achieve a substantial increase in net profit compared to the previous year.

In terms of profitability margins, we can see that the gross profit margin has remained relatively stable over the years, while the net profit margin has been volatile, with a significant increase in 2019, a sharp decline in 2020, and a moderate increase in 2021. Overall, Puma's financial performance has been relatively stable, with some fluctuations due to external factors such as the COVID-19 pandemic.

#### **FINDINGS**

Some key findings based on all the above analysis are:

- O The fact that Puma's current ratio has maintained over 1 during the time period shows that the business has been able to pay its short-term debts. However, the quick ratio has constantly been below 1, indicating that they would struggle to cover their present liabilities.
- O The corporation has managed its inventory effectively because the inventory turnover percentage has been high constantly. The accounts receivable turnover ratio, however, has been dropping, implying that Puma is taking longer to get payment from its clients.
- The corporation has been using less debt financing to fund its operations, as seen by the dropping debt-to-equity ratio.
- The gross profit margin has remained consistent throughout time, showing that the business has been able to keep its profitability despite changes in sales. The net profit margin, however, has fluctuated, showing a big rise in 2019 and a steep decrease in 2020. Additionally unstable has been the return-on-investment ratio, which shows how drastically Puma's profitability has changed over time.
- o Puma has been able to retain its liquidity, manage its assets well, lessen its dependency on debt financing, and maintain steady profitability, according to the company's financial parameters as a whole. However, over time, the company's profitability has fluctuated.

#### RECOMMENDATIONS

Based on the findings, Puma has performed well in managing its liquidity, assets, and debt. However, the company's profitability has been volatile, indicating that there may be room for improvement in this area.

To sustain in the market, Puma should focus on the following:

- Improve profitability
- Increase efficiency
- Maintain financial stability
- Diversify product line
- Maintain strong brand image

#### LIMITATIONS

- 1. Not all major financial analysis tools could be used due to insufficient or unclear data.
- 2. This paper has considered COVID-19 as the only reason for fluctuation in the business of the company.
- 3. The study is purely based on the past financial status and not the future.

#### **WAY FORWARD**

- i. Other financial statement analysis tools like Common size statement analysis, Trend analysis, Cash flow analysis and Fund flow analysis can be applied for better understanding of Puma's financial position.
- ii. This research paper can be used for comparing it with its competitors.
- iii. Predictions can be made based on this paper, given that there is no powerful external factor that can affect the company exponentially.

#### REFERENCES

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