Performance Analysis of LVMH Group's Acquisition of Tiffany Group – A Quantitative Study Based on Financial Indicators

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Abstract. Globalization and economic growth have intensified business competition, prompting expansion strategies like mergers and acquisitions (M&A). Yet, M&A success and predefined goals' complexity necessitates evaluation. Domestic research has predominantly focused on sectors like manufacturing, pharmaceuticals, and real estate, leaving the luxury goods industry under explored. Despite global luxury goods growth, China lags in luxury brand development and acquisitions. This study examines LVMH Group's acquisition of Tiffany Group, drawing data from sources such as Bloomberg, LVMH financial reports, Deloitte's Luxury Global Power Reports, and the internet. It provides an introduction to research significance, LVMH and Tiffany Group overview, and luxury goods industry analysis. It delves into acquisition motives, context, outcomes, and underlying motivations. The study reviews concepts and theories through a literature review. Finally, using financial metrics, it quantitatively assesses LVMH's pre-and post-acquisition performance, gauging merger impact. This research expands academic horizons by examining international M&A in the luxury goods sector, offers a reference for future M&A performance studies, and supports China's emerging luxury goods enterprises.

Keywords: LVMH Group, Mergers and Acquisitions (M&A), M&A Performance, Financial Indicators

1 Introduction

The intensifying global competition in the business landscape has driven many companies to adopt expansion strategies like mergers and acquisitions (M&A)[1]. One notable example is LVMH Moët Hennessy Louis Vuitton SE's (LVMH) acquisition of Tiffany & Co., a prominent luxury goods conglomerate. Despite protracted price negotiations, the deal ultimately amounted to $15.8 billion, making it one of the largest transactions in luxury goods history. This acquisition also marked the end of Tiffany's 183-year independence.

LVMH's acquisition of Tiffany solidified its leadership in the global jewelry market and the luxury goods sector. LVMH's extensive brand portfolio and financial strength provided substantial support for Tiffany, enabling it to expand globally. Tiffany's global reputation allowed LVMH to extend its market share and customer base[2]. However, challenges included

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the high acquisition cost and LVMH's weaker position in the U.S., necessitating significant investments for Tiffany's success there.

This research focuses on corporate M&A performance, particularly in the luxury goods sector, with LVMH as a case study. The study also incorporates foreign luxury goods corporate M&A cases to provide insights for Chinese luxury goods enterprises.

Despite LVMH's prominence in the global luxury goods market, its jewelry business hasn't reached its full potential, with most revenue coming from fashion and leather goods[3]. The Tiffany acquisition offers LVMH a chance to enhance its competitiveness in the jewelry sector, bringing in new customers and sales channels..

2 Method

Currently, global M&A performance assessment primarily relies on event studies and financial metrics analysis. Event studies, as exemplified by Qi Chen (2012)[4] and Nan Ye & Ling Hu(2020)[5], scrutinize specific events' impact on shareholder wealth and firm performance. This method is widely used in finance and economics to analyze how events affect stock prices and corporate values. Qi Chen (2012) examined China Mobile's acquisition of Shanghai Pudong Development Bank, using Cumulative Abnormal Returns (CAR) to gauge earnings impact, hinting at improved shareholder wealth and potential benefits for China Mobile. Similarly, Nan Ye and Ling Hu (2020) assessed Tencent's post-acquisition performance, finding a short-term CAR>0, indicating a positive impact on Tencent and potential value growth. In summary, event study methodology assesses event impact on company performance but doesn't analyze long-term M&A effects[6][7].

Financial metrics analysis evaluates M&A performance by examining financial statements, using metrics like net income, return on equity, and current ratio[8]. It quantifies M&A impact on financial health by comparing pre- and post-merger data, offering numerical insights into performance[9]. This method tracks changes in indicators like revenue and return on equity, aiding stakeholders in understanding how M&A influences financial performance[10][11][12].

Wang Fanping's (2019)[13]research on 329 Chinese M&A cases from 2009 to 2016 emphasized economic value added and financial metrics' role in M&A performance. Findings showed significant changes in most financial metrics but minimal alterations in economic value added. The author recommended relying more on financial metrics due to economic value added's potential limitations in reflecting M&A effects for a more accurate assessment.

When selecting financial indicators for analysis, how do you choose the right ones? We can follow the following four principles: functionality, objectivity, impartiality, and actionability, considering 15 specific financial data points for a comprehensive evaluation[14][15][16], as detailed in Table 1.

Table 1: Financial Indicator Selection Framework

Type	Indicator name
Long-term solvency	Current ratio
	Quick ratio
	Cash Ratio

Short-term solvency	Net Profit Ratio Total Assets Turnover Ratio Return on assets
Profitability	Operating Assets Turnover Inventory Turnover Accounts Receivable Turnover Current Assets Turnover Fixed Assets Turnover Total Assets Turnover
Development capacity	Total Assets Growth Rate Operating Income Growth Rate Net Assets Growth Rate

The article uses the financial indicator method to quantitatively analyse M&A performance from four aspects: solvency, profitability, operating capacity and development capacity. This method is intuitive, concise and provides accurate performance analysis of corporate financial data.

3 Research design

The data for this article is sourced exclusively from the annual publicly available reports of LVMH Group.

3.1 Selection of Financial Metrics

In this study, we draw upon previous research and opt for a quantitative analysis based on financial metrics, evaluating four dimensions: solvency, profitability, operational efficiency, and growth potential.

Solvency Metrics Selection. When examining short-term solvency, this study primarily selects the current ratio and the quick ratio. The calculation of the current ratio includes components of current assets, some of which may consist of inventory and prepaid expenses with relatively lower liquidity. To better reflect the true solvency of current assets, we employ the quick ratio, see equation (1) for an example.

$$R^c=(CA-I)/CL\ . \tag{1}$$

In the above equation, R^c represents the current ratio, CA denotes current assets, I stands for inventory, and CL represents current liabilities. Quick assets refer to current assets minus inventory, i.e., CA - I. By using the quick ratio, we can eliminate the impact of inventory on a company's short-term solvency, thus providing a more accurate reflection of its short-term debt-paying ability.

When evaluating long-term solvency, the main metric chosen is the debt-to-assets ratio, see equation (2) for an example.

$$R^D=TL/TA\ . \tag{2}$$

In the equation above, RD represents the debt-to-assets ratio, TL represents total liabilities, and TA represents total assets.

Selection of Profitability Indicators. Profitability assesses a company's profit generation capacity. This study employs various indicators, including gross profit margin on operating income, operating profit margin on operating income, net profit margin on operating income, total asset profit margin, and total asset net profit margin. These metrics offer clear insights into a company's profit status at specific stages, with some focusing on core product profitability (e.g., gross profit margin), while others gauge overall asset profitability (e.g., total asset profit margin). Refer to equations (3), (4), (5), (6), (7), and (8) for details.

$$\text{Gross Profit Margin on Operating Income} = \text{Gross Profit} / \text{Operating Income} . \quad (3)$$

$$\text{Gross Profit Margin on Operating Income} = \text{Gross Profit} / \text{Operating Income} \quad (4)$$

$$\text{Operating Profit Margin on Operating Income} = \text{Operating Profit} / \text{Operating Income} \quad (5)$$

$$\text{Net Profit Margin on Operating Income} = \text{Net Profit} / \text{Operating Income} \quad (6)$$

$$\text{Total Asset Profit Margin} = \text{Gross Profit} / \text{Gross Profit Margin on Operating Income} \quad (7)$$

$$\text{Total Asset Net Profit Margin} = \text{Total Assets} / \text{Gross Profit Margin on Operating Income} \quad (8)$$

Selection of Operating Capability Indicators. Operating capability assesses a company's ability to effectively use its assets to earn profits. It reflects the company's cash flow and operational management level. The faster the cash turnover, the higher the efficiency of asset utilization and the better the operational management level. This study focuses on analyzing the operating capability of LVMH Group before and after acquisitions, with a primary focus on two key indicators: accounts receivable turnover ratio and total asset turnover ratio, see equations (9) (10) or an example.

$$\text{Accounts Receivable Turnover Ratio} = \text{Cost of Goods Sold} / \text{Average Accounts Receivabl} \quad (9)$$

$$\text{Total Asset Turnover Ratio} = \text{Sales Revenue} / \text{Average Total Assets} \quad (10)$$

Selection of Growth Capability Indicators. Growth capability measures a company's scale expansion. We use revenue and total asset growth rates as indicators. Total asset growth reflects overall asset growth, including acquisitions. Revenue growth indicates market share and acquisition impact.

$$\text{Revenue Growth Rate} = \text{Current Year Revenue Growth} / \text{Previous Year Revenue} \quad (11)$$

$$\text{Total Asset Growth Rate} = \text{Current Year Total Asset Change} / \text{Previous Year Total Assets} (12)$$

4 Method

4.1 Debt Solvency Indicators

Using chosen debt solvency indicators and LVMH Group's pre-and post-acquisition balance sheet data, we can calculate and analyze the impact of acquiring Tiffany & Co. on LVMH Group's debt solvency. See Table 2 and Figure 1 for an example.

Table 2: LVMH Group's Debt Solvency Indicators

	T+1	T (acquisition completed)	T-1
Duration (years)	2021.12	2021.6	2020.12
Current ratio	1.22	1.10	1.57
Quick ratio	0.63	0.52	1.06
Gearing ratio	0.66	0.63	0.64

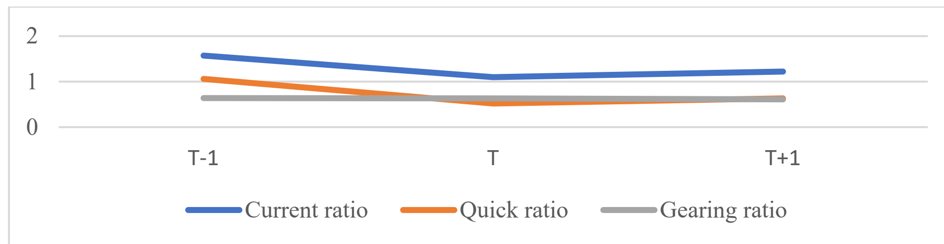

Figure 1: LVMH Group's Debt Solvency Indicators

Post-acquisition in early 2021, Table 2 shows a notable drop in LVMH Group's current and quick ratios due to assuming Tiffany & Co.'s debts. This led to increased current liabilities, higher accounts receivable, inventory, and reduced cash, weakening short-term debt solvency. However, Table t+1 data indicates improving short-term debt solvency over time. Long-term debt solvency is now stronger than pre-merger, with overall long-term debt solvency rising from 63% to 66%. Analyzing post-merger debt solvency indicates Tiffany & Co.'s acquisition weakened short-term but strengthened long-term debt solvency for LVMH Group.

4.2 Profitability Indicators

Using chosen profitability indicators and LVMH Group's pre-and post-acquisition income statement data, we can calculate and analyze the impact of acquiring Tiffany & Co. on LVMH Group's profitability. See Table 3 and Figure 2 for an example.

Table 3: LVMH Group's Profitability Indicators

	T+1	T-1
Time	2021	2020
Operating Income Gross Margin	0.68	0.64
Operating Income Profit Margin	0.27	0.19
Net Operating Income Margin	0.20	0.11
Total Assets Profit Margin	645.00	449.67
Net profit margin on total assets	1931.01	1697.98

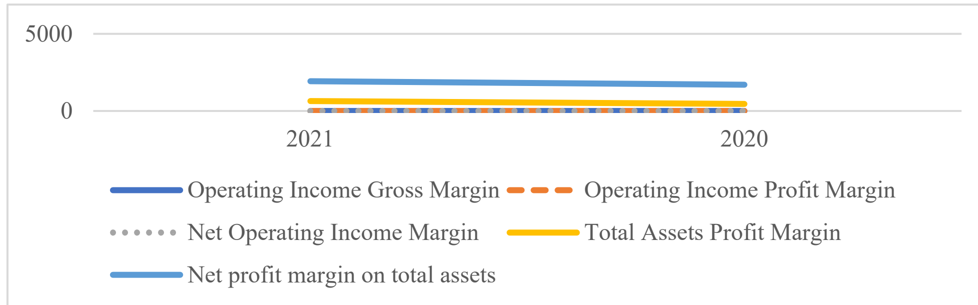

Figure 2: LVMH Group's Profitability Indicators

The analysis shows LVMH's acquisition of Tiffany & Co. boosted its jewelry sector competitiveness, expanded its customer base, and distribution channels. This synergy improved financial performance indicators—gross profit margin, operating profit margin, net profit margin, total asset profit margin, and total asset net profit margin—significantly enhancing profitability.

4.3 Operational Efficiency Indicators

Using chosen operational efficiency indicators and LVMH Group's pre-and post-acquisition financial statement data, we can calculate and analyze the impact of acquiring Tiffany & Co. on LVMH Group's operational efficiency. See Table 4 and Figure 3 for an example.

Table 4: LVMH Group's Operational Efficiency Indicators

	T+1	T
Time	2021	2020
Accounts Receivable Turnover Ratio	4.99	4.19
Total assets turnover	0.49	0.36

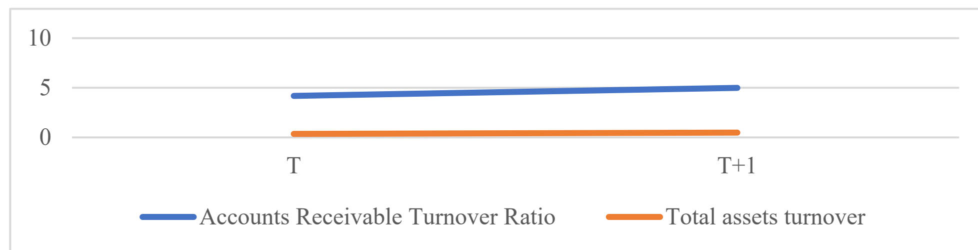

Figure 3: LVMH Group's Operational Efficiency Indicators

Based on the analysis presented above, it is evident that following the acquisition of Tiffany & Co., LVMH Group has significantly expanded its global influence, diversified its business scope, and gained easier access to talent. These factors have led to a notable improvement in both accounts receivable turnover ratio and total asset turnover ratio, thereby enhancing the company's operational efficiency.

4.4 Development Capability Indicators

Using chosen development capability indicators and LVMH Group's pre-and post-acquisition financial statement data, we can calculate and analyze the impact of acquiring Tiffany & Co. on LVMH Group's development capability. See Table 5 and Figure 4 for an example.

Table 5: LVMH Group's Development Capability Indicators

	T+1	T
Time	2021	2020
Revenue Growth Rate	0.44	-0.16
Total Assets Growth Rate	0.15	0.11

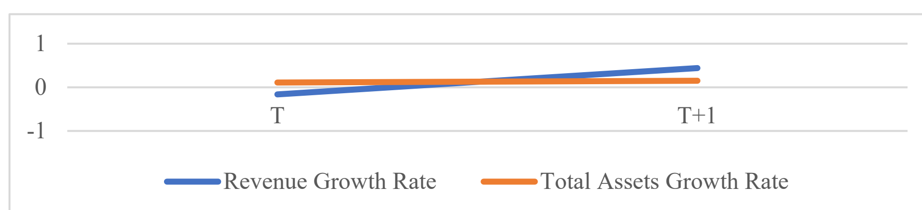

Figure 4: LVMH Group's Development Capability Indicators

Analyzing Table 5, it's clear that post-acquisition of Tiffany & Co., LVMH Group significantly improved its development capability. This stems from a broader product range, diverse operational channels, and enhanced overall competitiveness. Both revenue and total asset growth rates saw marked improvements, signifying increased development capability.

This chapter quantitatively analyzed LVMH Group's performance using financial indicators across four dimensions: debt solvency, profitability, operational efficiency, and development capability. The conclusion is that the acquisition of Tiffany & Co. significantly improved LVMH Group's long-term debt solvency, profitability, operational efficiency, and development capability. Although short-term debt solvency was temporarily impacted by acquisition costs and increased inventory, it is recovering. Overall, this acquisition has enhanced both short-term and long-term performance.

5 Conclusion

In summary, our comprehensive study delved into LVMH Group's acquisition of Tiffany & Co., with a sharp focus on the rationale behind this strategic move and the ensuing results. Our rigorous analysis of financial data unveiled a compelling narrative – this acquisition has not only significantly enhanced LVMH's financial stability, profitability, operational efficiency, and growth potential but has also solidified its unassailable leadership position within the luxury goods industry. It stands as a resounding success story.

The luxury goods sector continues to flourish, and our research, with its focus on international luxury brand acquisitions, serves as an inspiring call for scholars to explore the boundless global opportunities within this domain. This study extends invaluable insights to those immersed in

the study of M&A performance, ultimately nurturing the growth trajectory of burgeoning Chinese luxury brands amid the fiercely competitive M&A landscape.

References

[1] Su Yu. Performance Study of LVMH Group's Acquisition of Bulgari. 2022. Anhui Agricultural University, MA thesis.

[2] Wei Ruyun. Analysis of Synergistic Effects of LVMH Group's Acquisition of RIMOWA. Northern Economics and Trade, 2022(12):110-113.

[3] Xin Haolin. A Study on LVMH Group's Continuous Mergers and Acquisitions Behavior. Beijing University of Posts and Telecommunications, 2019.

[4] Chen Qi. Study on Shareholder Wealth in Mergers and Acquisitions Events - A Case Study of China Mobile's Investment in Shanghai Pudong Development Bank. Contemporary Economics, 2012(07):53-55.

[5] Ye Nan, Hu Ling. Performance Analysis of Tencent's Cross-Border Mergers and Acquisitions - Based on Event Study Method. Financial Theory and Practice Exploration, 2020(01):61-68. DOI:10.16620/j.cnki.jrjy.2020.01.007.

[6] Liu Zhiqiang. Empirical Study on the Performance and Influencing Factors of Mergers and Acquisitions of Listed Companies. Jilin University, 2007.

[7] Feng Yue. Research on the Performance of High-Quality Enterprise Mergers and Acquisitions. Shandong University, 2018.

[8] Wang Xingzhou. Research on the Evaluation of Operating Performance of State-owned Enterprises. Wuhan University, 2013.

[9] Bradrup Performance Management. Fudan University Press, 2003.

[10] Li Qian. Research on Key Performance Indicator Assessment Method. Tianjin Business School, 2006.

[11] Wang Ziyu. Theoretical and Applied Research on the Performance Evaluation Model of Strategic Mergers and Acquisitions. Beijing Jiaotong University, 2009.

[12] Zhang Xu. Research on the Motivation and Performance of Mergers and Acquisitions of State-owned Enterprises in China. University of International Business and Economics, 2012.

[13] Wang Fanping. Is Economic Value Added a Better Performance Measurement Tool than Accounting Indicators? - Based on the Study of Mergers and Acquisitions of A-share Listed Companies. Shanghai Finance, 2019(10):36-40.(2013)

[14]Trepanier S,Crenshaw J T,Yoder-Wise P S.Risk Taking[J].Nursing Administration Quarterly,2016,40(4):307-311.

[15]Said H B,Zouari-Hadiji R,Bouri A.French Bank Mergers and Acquisitions Performance[J].RiskGovernance and Control:Financial Markets and Institutions,2017,7:113-25.

[16]Chrysovalantou Milliou,Apostolis Pavlou.Upstream Mergers,Downstream Competition,and R&DInvestments[J].Journal of economics&management strategy,2013,22(4):787-809.