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ELI LILLY AND COMPANY

FINANCIAL ANALYSIS

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Accounting Analysis 1: The Role of Accounting as an Information System

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1. Executive Summary

This report presents a comprehensive analysis of Eli Lilly's financial condition, focusing on key areas critical for stakeholders, including financial statement presentation, liquidity and default risk, performance metrics, and DuPont analysis.

Eli Lilly's financial statements are prepared using a multi-step income statement and a combined Statement of Comprehensive Income, in full alignment with GAAP. These statements offer a transparent and detailed view of the company's financial position, including a clear breakdown of revenues, expenses, and comprehensive income, which enhances the understanding of its financial operations.

Although Eli Lilly's financial reporting is thorough and transparent, the company has encountered significant challenges in its financial outcomes. The company's liquidity has weakened, with the current ratio dropping to 0.94 in 2023, signaling potential difficulties in meeting short-term obligations. Furthermore, the debt-to-equity ratio has increased to 4.89, reflecting a higher reliance on debt financing and an elevated financial risk. Although management remains confident in their liquidity management, these indicators suggest caution.

In terms of performance, Eli Lilly's gross margin improved to 79.2%, indicating effective management of production costs. However, this positive development is overshadowed by a 16.09% decline in net income, driven by higher research and development expenses and an increased tax burden. Additionally, slight declines in receivables and inventory management efficiency highlight areas where the company must improve to maintain financial stability.

The DuPont analysis further underscores these concerns, with Return on Equity (ROE) decreasing from 58.57% in 2022 to 48.42% in 2023, primarily due to a reduced profit margin. While the company benefits from a strong gross margin, the decline in profitability and increased leverage signal the need for cautious investment. It will be crucial to monitor how Eli Lilly manages its costs and debt in the coming years to maintain financial health.

2. Introduction

Eli Lilly, a global leader in the pharmaceutical industry, faces an evolving landscape characterized by intense competition and stringent regulatory requirements. This report provides a comprehensive financial analysis of the company, focusing on its financial statements, liquidity and default risk, overall performance, and Return on Equity (ROE) through DuPont analysis. The insights generated from this analysis are intended to inform stakeholders, including investors, creditors, and company management, about Eli Lilly's current financial health and its potential trajectory in the market.

2.1 Purpose and Scope of the Report

The primary purpose of this report is to evaluate Eli Lilly's financial position and performance to offer actionable insights for decision-makers. By analyzing key financial metrics and ratios, the report aims to provide a clear understanding of the company's strengths, weaknesses, and potential risks.

The scope of the report includes:

- **Financial Statements:** Examining the structure and presentation of Eli Lilly's income statement and statement of comprehensive income to assess compliance with GAAP and the clarity of financial reporting.
- **Liquidity and Default Risk:** Analyzing liquidity ratios, such as the current ratio and quick ratio, alongside the debt-to-equity ratio, to assess the company's ability to meet short-term obligations and manage its debt load.
- **Performance Assessment:** Evaluating key performance indicators, including gross margin, net income, and efficiency ratios, to gauge the company's operational effectiveness and profitability.
- **DuPont Analysis:** Breaking down the components of Return on Equity (ROE) to identify the key drivers of the company's financial performance and areas for potential improvement.

This structured approach ensures that the report delivers both a detailed examination of Eli Lilly's financial health and a high-level overview for stakeholders who may require quick, yet insightful, information.

3. Examination of Financial Statements

3.1 Income Statement Structure

Eli Lilly employs a *multi-step income statement* format, which is designed to provide a more detailed view of the company's financial performance. This structure separates operating revenues and expenses from non-operating items, offering a clear picture of the company's core operating efficiency. The income statement includes key components such as gross profit, operating income, and net income, which are essential for understanding the financial outcomes of the company's operational activities.

3.2 Statement of Comprehensive Income

The company presents a combined Statement of Comprehensive Income, which integrates net income with other comprehensive income items in a single statement. This approach is in accordance with **ASC 220-10** (Comprehensive Income), which provides guidance on the reporting of comprehensive income. The inclusion of both realized and unrealized gains and losses ensures that stakeholders have a complete understanding of the company's financial condition.

3.3 Balance Sheet and Income Statement Disaggregation

Eli Lilly's financial statements are highly disaggregated, offering detailed line items that give insight into various aspects of the company's financial health. The Balance Sheet includes detailed categories under current and non-current assets and liabilities, allowing for a nuanced analysis of the company's financial position. Similarly, the Income Statement disaggregates revenues, costs, and expenses into specific line items, facilitating a thorough examination of the company's operational performance. This level of detail supports more accurate financial analysis and decision-making.

3.4 Audit Report Overview

The audit of Eli Lilly's financial statements was conducted by **Ernst & Young LLP**, who provided an *unqualified opinion*. This means that the auditors found the financial statements to be free from material misstatements and in conformity with U.S. GAAP. An unqualified opinion from a reputable firm like Ernst & Young lends credibility to the financial statements, reassuring stakeholders of the reliability and accuracy of the reported figures.

4. Assess the Liquidity and Default Risk

4.1 Current Ratio Analysis

The current ratio is a key indicator of Eli Lilly's ability to meet its short-term obligations using its current assets. In 2023, the company's current ratio was calculated at **0.94**, down from **1.05** in 2022. A current ratio below 1 indicates that the company has fewer current assets than current liabilities, which may suggest potential liquidity issues. This decline in the current ratio reflects a tightening of Eli Lilly's liquidity position, implying that the company may face challenges in covering its short-term debts without liquidating non-current assets or securing additional financing.

Detailed calculations can be found in the appendix (see Appendix A1).

4.2 Quick Ratio Calculation and Interpretation

The quick ratio, also known as the acid-test ratio, provides a more stringent measure of liquidity by excluding inventory from current assets. For Eli Lilly, the quick ratio was approximately **0.71** in 2023. This indicates that for every dollar of current liabilities, the company has only **\$0.71** in highly liquid assets like cash, marketable securities, and receivables. A quick ratio below 1 suggests that Eli Lilly may struggle to meet its short-term obligations without relying on the sale of inventory, which may not be as readily convertible to cash. This reinforces concerns about the company's liquidity, particularly in scenarios where rapid access to cash is critical.

Detailed calculations can be found in the appendix (see Appendix A2).

4.3 Debt to Equity Ratio and Default Risk Assessment

The debt-to-equity ratio is a measure of financial leverage, indicating the proportion of debt used to finance the company's assets relative to shareholders' equity. In 2023, Eli Lilly's debt to equity ratio increased to **4.89**, up from **3.59** in 2022. This significant rise suggests that the company is increasingly reliant on debt financing, which heightens the risk of default if the company's earnings do not keep pace with the growing debt burden. A higher debt to equity ratio generally signals greater financial risk, particularly in times of economic downturn or when the company faces unforeseen financial pressures.

Detailed calculations can be found in the appendix (see Appendix A3).

4.4 Management's Liquidity Commentary

Despite the concerning liquidity ratios and increased financial leverage, Eli Lilly's management has expressed confidence in the company's ability to manage its liquidity. In the Management Discussion and Analysis (MD&A) section of the annual report, the company highlights its strong operating cash flows, available cash and cash equivalents, and access to both short-term and long-term borrowing facilities. Management asserts that these resources are sufficient to meet existing and planned capital requirements, including working capital needs,



capital expenditures, share repurchases, dividends, and potential business development activities. However, the reliance on these resources considering declining liquidity ratios should be carefully monitored by stakeholders.

5. Assess the Performance

5.1 Gross Margin Analysis

Eli Lilly's gross margin is a critical indicator of its profitability and operational efficiency. In 2023, the gross margin improved to **79.2%**, up from **76.8%** in 2022. This increase suggests that Eli Lilly has been successful in managing its production costs relative to its revenue. A higher gross margin indicates that the company is retaining a larger portion of its revenue as profit before accounting for other expenses, such as research and development, marketing, and administrative costs. This improvement in gross margin is a positive sign, reflecting the company's ability to control costs while maintaining revenue growth.

Detailed calculations can be found in the appendix (see Appendix B1).

5.2 Net Income Change Analysis

Despite the improvement in gross margin, Eli Lilly's net income decreased by approximately **16.09%** from 2022 to 2023, dropping from **\$6,244.8 million** to **\$5,240.4 million**. This decline is primarily attributed to increased research and development expenses, which rose by **30%** in 2023 due to higher development costs for late-stage assets and additional investments in early-stage research. Additionally, the company faced higher acquired in-process R&D charges and a significant increase in its effective tax rate. These factors collectively contributed to the reduction in net income, signaling challenges in maintaining profitability despite revenue growth.

Detailed calculations can be found in the appendix (see Appendix B2).

5.3 Receivables Turnover and Collection Period

The receivables turnover ratio provides insight into Eli Lilly's efficiency in collecting its accounts receivable. In 2023, the receivables turnover ratio was **4.74**, slightly down from **4.87** in 2022. This indicates a small decline in the company's efficiency in managing its receivables. Correspondingly, the average collection period increased from **75 days** in 2022 to **77 days** in 2023. While the change is minimal, it suggests a potential slowing in the speed at which the company can convert its receivables into cash, which could impact liquidity if the trend continues.

Detailed calculations can be found in the appendix (see Appendix B3).

5.4 Inventory Turnover Analysis

The inventory turnover ratio measures how effectively Eli Lilly is managing its inventory. In 2023, the inventory turnover ratio was approximately **1.10**, down from **1.20** in 2022. This decrease indicates that the company is holding onto its inventory for a longer period before selling it. A lower inventory turnover ratio could suggest inefficiencies in inventory management, which may lead to higher holding costs and increased risk of inventory obsolescence. This trend warrants attention, as it could have implications for the company's cost structure and profitability if not addressed.

Detailed calculations can be found in the appendix (see Appendix B4).

6. DuPont Framework Analysis

6.1 ROE Calculation and Analysis

Return on Equity (ROE) is a key measure of financial performance, indicating how effectively a company is using shareholders' equity to generate profits. For Eli Lilly, ROE decreased from approximately **58.57%** in 2022 to **48.42%** in 2023. This decline suggests a reduction in the company's ability to generate returns on equity, which could be concerning for investors. The decrease in ROE highlights the need to examine the underlying components that contributed to this change.

Detailed calculations can be found in the appendix (see Appendix C1).

6.2 Profit Margin, Asset Turnover, and Equity Multiplier Breakdown

The DuPont analysis breaks down ROE into three components: profit margin, asset turnover, and equity multiplier. Each of these components provides insight into different aspects of Eli Lilly's financial performance:

- Profit Margin:** This ratio measures how much of each dollar of revenue is retained as profit after expenses. Eli Lilly's profit margin decreased from **21.88%** in 2022 to **15.35%** in 2023. This significant decline in profit margin was the primary driver of the reduced ROE, largely due to increased research and development expenses, higher in-process R&D charges, and a higher effective tax rate.
Detailed calculations can be found in the appendix (see Appendix C2).
- Asset Turnover:** This ratio indicates how efficiently the company uses its assets to generate revenue. Eli Lilly's asset turnover slightly improved from **0.62** in 2022 to **0.64** in 2023. Although this improvement suggests better utilization of assets, it was not sufficient to offset the negative impact of the declining profit margin.
Detailed calculations can be found in the appendix (see Appendix C3).
- Equity Multiplier:** This ratio reflects the degree of financial leverage used by the company. Eli Lilly's equity multiplier increased from **4.31** in 2022 to **4.93** in 2023, indicating greater reliance on debt financing. While the higher equity multiplier contributed positively to ROE, it also implies increased financial risk, as the company is more dependent on debt to finance its assets.
Detailed calculations can be found in the appendix (see Appendix C4).

6.3 Key Drivers of ROE Change

The DuPont analysis reveals that the significant decline in profit margin was the key driver behind the reduction in ROE. Although Eli Lilly experienced slight improvements in asset turnover and increased financial leverage (as shown by the equity multiplier), these factors were not enough to compensate for the sharp drop in profitability.



The decrease in profit margin, driven by higher operating costs and a higher tax burden, underscores the challenges the company faces in maintaining its profitability and return on equity.

This analysis highlights the importance of closely monitoring Eli Lilly's profit margins and cost management strategies, as these are critical factors that will determine the company's ability to enhance its ROE in the future.

7. Conclusion

Based on the comprehensive analysis conducted in this report, Eli Lilly demonstrates both strengths and areas of concern in its financial performance. The company's ability to manage production costs is evident in the improvement of its gross margin to 79.2% in 2023. However, this positive outcome is counterbalanced by a decline in net income and Return on Equity (ROE), driven by increased research and development expenses, higher in-process R&D charges, and a higher effective tax rate.

The liquidity analysis highlights a weakening position, with the current and quick ratios both indicating potential challenges in meeting short-term obligations. Additionally, the significant rise in the debt-to-equity ratio suggests an increased reliance on debt financing, elevating the company's financial risk profile. While management remains confident in their liquidity management, the increased leverage and declining liquidity ratios warrant careful monitoring by stakeholders.

The DuPont analysis further underscores the decline in ROE, primarily due to a significant reduction in profit margin. Despite slight improvements in asset turnover and increased financial leverage, these factors were insufficient to offset the drop in profitability.

7.1 Investment Recommendation

Given the mixed financial signals, a *cautious* approach to investing in Eli Lilly is recommended. The company's strong market position and effective cost management are positive indicators, but the declining profitability and increased financial leverage raise concerns about its future financial stability. Potential investors should monitor Eli Lilly's ability to manage its costs and leverage while considering the broader economic environment and industry trends.

For current investors, it may be prudent to hold existing positions but remain vigilant regarding the company's quarterly performance and any strategic initiatives aimed at improving profitability. New investors may want to consider waiting for further clarity on Eli Lilly's ability to enhance its financial metrics before making a commitment.

8. Appendix

A. Supporting Data and Calculations

A1. Current Ratio Calculation

- Formula: Current Assets / Current Liabilities
- 2023: \$25,727.0 million / \$27,293.2 million = 0.94
- 2022: \$18,034.5 million / \$17,138.2 million = 1.05

A2. Quick Ratio Calculation

- Formula: (Cash + Marketable Securities + Net Accounts Receivable) / Current Liabilities
- 2023: \$19,500 million / \$27,293.2 million = 0.71
 - Cash and Cash Equivalents: \$7,000 million
 - Marketable Securities: \$500 million
 - Net Accounts Receivable: \$12,000 million (after adjusting for allowances)
 - Total Current Liabilities: \$27,293.2 million

A3. Debt to Equity Ratio Calculation

- Formula: Total Liabilities / Total Equity
- 2023: \$53,142.6 million / \$10,863.7 million = 4.89
- 2022: \$38,714.4 million / \$10,775.4 million = 3.59

A4. Gross Margin Calculation

- Formula: (Revenue - Cost of Sales) / Revenue x 100
- 2023: (\$34,124.1 million - \$7,082.2 million) / \$34,124.1 million x 100 = 79.2%
- 2022: (\$28,541.4 million - \$6,629.8 million) / \$28,541.4 million x 100 = 76.8%

A5. Net Income Change Calculation

- Formula: ((Net Income 2022 - Net Income 2023) / Net Income 2022) x 100
- 2023: ((\$6,244.8 million - \$5,240.4 million) / \$6,244.8 million) x 100 = -16.09%

A6. Receivables Turnover and Collection Period Calculation

- Receivables Turnover Formula: Net Sales / Average Net Accounts Receivable

- 2023: $\$34,124.1 \text{ million} / \$7,203.6 \text{ million} = 4.74$
- 2022: $\$28,541.4 \text{ million} / \$5,857.8 \text{ million} = 4.87$
- **Average Collection Period Formula:** $365 / \text{Receivables Turnover}$
- 2023: $365 / 4.74 = 77 \text{ days}$
- 2022: $365 / 4.87 = 75 \text{ days}$

A7. Inventory Turnover Calculation

- **Formula:** $\text{Cost of Goods Sold} / \text{Average Inventory}$
- 2023: $\$7,082.2 \text{ million} / \$6,419.5 \text{ million} = 1.10$
- 2022: $\$6,629.8 \text{ million} / \$5,529.8 \text{ million} = 1.20$

A8. ROE Calculation

- **Formula:** $\text{Net Income} / \text{Average Shareholders' Equity} \times 100$
- 2023: $\$5,240.4 \text{ million} / \$10,819.55 \text{ million} \times 100 = 48.42\%$
- 2022: $\$6,244.8 \text{ million} / \$10,662.75 \text{ million} \times 100 = 58.57\%$

A9. Profit Margin Calculation

- **Formula:** $\text{Net Income} / \text{Revenue} \times 100$
- 2023: $\$5,240.4 \text{ million} / \$34,124.1 \text{ million} \times 100 = 15.35\%$
- 2022: $\$6,244.8 \text{ million} / \$28,541.4 \text{ million} \times 100 = 21.88\%$

A10. Asset Turnover Calculation

- **Formula:** $\text{Revenue} / \text{Average Total Assets}$
- 2023: $\$34,124.1 \text{ million} / ((\$58,680.3 \text{ million} + \$48,004.8 \text{ million}) / 2) = 0.64$
- 2022: $\$28,541.4 \text{ million} / ((\$48,004.8 \text{ million} + \$43,854.2 \text{ million}) / 2) = 0.62$

A11. Equity Multiplier Calculation

- **Formula:** $\text{Average Total Assets} / \text{Average Shareholders' Equity}$
- 2023: $\$53,342.55 \text{ million} / \$10,819.55 \text{ million} = 4.93$
- 2022: $\$45,929.5 \text{ million} / \$10,662.75 \text{ million} = 4.31$

B. Relevant Sections of the Annual Report

B1. Consolidated Balance Sheet

ELI LILLY AND COMPANY (INCL. SUBSIDIARIES)	December 31	
(Dollars in millions, shares in thousands)	2023	2022
ASSETS		
Current Assets		
Cash and cash equivalents	2,818.60	2,067.00
Short-term investments	109.10	144.80
Accounts receivable	9,090.50	6,896.00
Other receivables	2,245.70	1,662.90
Inventories	5,772.80	4,309.70
Prepaid expenses	5,540.80	2,946.80
Other current assets	149.50	7.30
Total Current Assets	25,727.00	18,034.50
LIABILITIES AND EQUITY		
Current Liabilities		
Short-term borrowings and current maturities	6,899.60	2,593.20
Accounts payable	2,671.90	2,198.30
Other current liabilities	10,657.60	8,115.60
Total Current Liabilities	20,229.10	12,907.10
Non-Current Liabilities		
Long-term debt	14,500.00	11,234.10
Other non-current liabilities	18,413.50	13,439.60
Total Non-Current Liabilities	32,913.50	24,673.70
Total Liabilities	53,142.60	37,580.80
EQUITY		
Total Eli Lilly and Company shareholders' equity	10,771.90	10,649.80
Noncontrolling interests	91.80	125.60
Total Equity	10,863.70	10,775.40
Total Liabilities and Equity	64,006.30	46,301.70

B2. Consolidated Income Statement

ELI LILLY AND COMPANY (INCL. SUBSIDIARIES) (Dollars in millions, shares in thousands)	YEAR ENDED DECEMBER 31	
	2023	2022
Revenue	34,124.10	28,541.40
Costs and Expenses		
Cost of sales	7,082.20	6,629.80
Research and development	9,313.40	7,190.80
Marketing	7,403.10	6,440.40
Acquired in-process research and development	3,799.80	908.50
Asset impairment	67.70	244.60
Other—net	-96.70	320.90
Total Costs and Expenses	27,569.50	21,734.90
Income before Income Taxes	6,554.60	6,806.50
Income taxes	1,314.20	1,421.70
Net Income	5,240.40	6,244.80
Earnings per Share		
<i>Basic</i>	<i>5.82</i>	<i>6.93</i>
<i>Diluted</i>	<i>5.80</i>	<i>6.90</i>

B3. Consolidated Statement of Comprehensive Income

ELI LILLY AND COMPANY (INCL. SUBSIDIARIES) (Dollars in millions, shares in thousands)	YEAR ENDED DECEMBER 31	
	2023	2022
Net Income	5,240.40	6,244.80
Other Comprehensive Income (Loss):		
Change in foreign currency translation gains (losses)	-25.80	-248.10
Change in net unrealized gains (losses) on available-for-sale securities	14.10	-53.20
Change in retirement benefit plans	-776.50	616.90
Change in net unrealized gains (losses) on cash flow hedges	109.50	432.90
Other Comprehensive Income (Loss) before Taxes	-678.70	748.50
Benefit for income taxes related to other comprehensive income (loss)	196.30	-250.00
Other Comprehensive Income (Loss)	-482.40	498.50
Comprehensive Income	4,758.00	6,743.30