

Financial Performance Analysis of U.S. Grocery Retailers Using DuPont Model

Zihao Zhang*

Aquinas High School, California, United State

*Corresponding author: zizhang@aquinashs.net

Abstract. This paper applies the DuPont analysis framework to evaluate the financial performance of three leading U.S. grocery retailers—Walmart, Costco, and Target—from to. By decomposing Return on Equity (ROE) into net profit margin, total asset turnover, and equity multiplier, the study identifies significant differences in profitability, operational efficiency, and financial leverage among the firms. The analysis reveals that while Walmart maintains scale-driven consistency, it operates with relatively thin margins. Costco demonstrates strong asset efficiency and stable leverage, suggesting robust financial discipline. Target, however, exhibits volatility in both profitability and capital structure, reflecting ongoing strategic adjustments. Based on these findings, the paper proposes three development recommendations: optimizing profit margins through product-level strategies, maintaining prudent financial leverage, and accelerating digital transformation—particularly in real-time supply chain management. These strategies aim to improve resilience and long-term competitiveness in a dynamic and margin-sensitive retail environment. The study offers insights for both academic research and industry practitioners seeking to understand financial health through an applied DuPont lens.

Keywords: DuPont analysis; grocery retail; return on equity; Walmart; Costco.

1. Introduction

The grocery retail industry is a critical component of the global economy, providing essential goods to households and contributing significantly to employment and consumer spending. In recent years, this sector has experienced rapid transformation due to evolving consumer expectations, technological innovation, and intense market competition. The COVID-19 pandemic further accelerated structural changes, forcing retailers to adapt quickly through supply chain reform, inventory control, and digital channel development.

This study investigates the financial performance of three leading grocery retailers in the United States—Walmart, Costco, and Target—using the DuPont analysis framework. Although these companies operate within the same industry, their financial outcomes and strategic approaches vary significantly. By comparing their return on equity (ROE) and its core components—net profit margin, total asset turnover, and equity multiplier—this paper seeks to identify key differences in performance and uncover underlying structural inefficiencies. The motivation behind this research lies in understanding how internal operational strategies influence financial results, particularly in the context of post-pandemic disruptions. To address these questions, the remainder of this paper is structured as follows: Chapter 2 introduces the industry background and company profiles; Chapter 3 presents a comparative financial analysis based on DuPont decomposition; Chapter 4 proposes development recommendations; and Chapter 5 concludes with a summary of findings and insights.

2. Overview of the Grocery Retail Industry

2.1. Development History of the Grocery Retail Industry

The grocery retail industry in the U.S. is large and competitive. Huge companies like Walmart, Costco, and Target lead the industry. This industry features low profit margins, high inventory turnover, and price-sensitive consumers. The evolution of the grocery retail sector has been influenced by various factors, including economies of scale, distribution efficiency, and competitive

pricing. In his comprehensive study of the UK food retail industry, Clough highlighted how structural changes [1], driven by socio-economic shifts and policy decisions, have significantly impacted retail operations and strategies. These insights underscore the importance of understanding the historical context when analyzing current industry dynamics. There are three leading companies in the United States, namely, Walmart Inc, Costco Wholesale corporation, and Target corporation.

2.2. Company Profiles

2.2.1 Walmart Inc.

Walmart is the largest grocery retailer in the United States and nowhere is this dominance more evident than in its massive store network and cost-leadership strategy. Known for operating over 10,500 stores globally as of , Walmart reported a total revenue of \$611.3 billion in fiscal year, making it the world's largest company by revenue. Slim as its margins are—just 1.91% net in—it continues to lead through scale and operational consistency. As Miao points out [2], Walmart's strength lies not only in its supply chain optimization, but also in its ability to maintain price competitiveness while sustaining profitability, however narrow. Indeed, few companies can match its logistical infrastructure.

2.2.2 Costco wholesale corporation

Efficient and disciplined as its operations are, Costco has built its brand on simplicity and volume. Through its membership-based warehouse model, Costco operates more than 870 locations worldwide as of . In , the company posted \$237.7 billion in revenue and \$6.3 billion in net income, achieving a solid 2.65% profit margin. What distinguishes Costco is not the variety of its offerings but the consistency of its execution. According to Nguyen [3], it is Costco's integrated supply chain, rather than aggressive expansion, that underpins its ability to offer competitive pricing while maintaining profitability.

2.2.3 Target corporation

Target, while positioned as a general merchandise retailer, has in recent years expanded its grocery section to compete more directly with other large-format players. With emphasis on convenience and in-store experience, Target reported a remarkable return on equity of 54.15% in , driven by post-pandemic consumer demand and efficient execution. Rarely does a company achieve such a high ROE without aggressive pricing—but Target did. However, the following year saw a steep drop in profitability, mainly due to inventory failures and rising input costs. As Clough explains [4], structural changes in retail often expose companies like Target to volatility when consumer expectations shift rapidly. Although its operational agility is commendable, one must also acknowledge that brand experience alone—though valuable—cannot shield a retailer from fundamental supply chain inefficiencies.

3. Financial Performance Comparison Based on DuPont Analysis

3.1. Comparison of Return on Equity

According to the ROE function (1), Return on Equity is a financial ratio that evaluates a company's profitability from shareholders' equity. It is an essential component of DuPont analysis and reflects the effect of profitability, efficiency and financial leverage. A high ROE normally indicates effective capital use and strong financial performance (see Table 1).

$$\text{Return on Equity (ROE)} = \text{Net Profit Margin} \times \text{Total Asset Turnover} \times \text{Equity Multiplier} \quad (1)$$

Table 1. ROE Sheet

| | 2022 | 2023 | 2024 |
|------------------------------|--------|--------|--------|
| Walmart Inc. | 16.42% | 15.23% | 18.50% |
| Costco Wholesale Corporation | 30.59% | 27.54% | 30.27% |
| Target Corporation | 54.15% | 24.75% | 30.81% |

3.1.1 Walmart Inc.

Walmart’s ROE slightly declined from 16.42% in 2022 to 15.23% in 2023, but recovered to 18.50% in 2024, suggesting improvements in either profitability or asset efficiency. This fluctuation, while moderate, aligns with Walmart’s operational pattern. Given its consistently low net profit margin (1.91% in 2023), the overall trend reflects a stable but margin-sensitive model—one that depends heavily on volume, scale, and cost control.

3.1.2 Costco wholesale corporation

Costco maintained high ROE throughout the three-year period, with a brief dip in 2023. The high ROE levels are driven by its efficient membership-based model, high inventory turnover, and disciplined financial leverage. Its consistency reflects operational resilience in a competitive retail market.

3.1.3 Target corporation

Target showed the most volatility in ROE. After reaching an exceptional 54.15% in 2022, its ROE dropped significantly in 2023, likely due to reduced net income or rising costs. The recovery in 2024 suggests improved cost control or enhanced profitability initiatives.

Walmart’s, Costco’s and Target’s ROEs do not only reflect their internal financial strategies, but also the external effects of the COVID-19 pandemic and its aftermath. Costco maintained stable and high ROE due to its efficient model. Walmart showed steady but lower ROE, while Target experienced major fluctuation—peaking in 2022, dropping in 2023, then recovering in 2024.

These shifts reflect post-pandemic changes in consumer demand, supply chain costs, and inflation. As noted by Deloitte [5], the pandemic disrupted the retail sector through decreased store traffic and rising operating costs, which negatively impacted key financial indicators like ROE. By 2024, most firms had begun adapting through cost control and structural improvements.

3.2. Comparison of Net profit Margin

Only when all expenses have been deducted does the net profit margin reveal the true proportion of revenue that remains as net income. It is one of the most widely used indicators of a firm’s pricing efficiency and cost control. A higher net profit margin generally signals stronger financial discipline, greater operational efficiency, and a more resilient business model.

Table 2. Net Profit Margin Sheet

| | 2022 | 2023 | 2024 |
|------------------------------|-------|-------|-------|
| Walmart Inc. | 2.38% | 1.91% | 2.10% |
| Costco Wholesale Corporation | 2.81% | 2.65% | 3.05% |
| Target Corporation | 6.55% | 2.55% | 3.80% |

3.2.1 Walmart Inc.

According to the Table 2 shown above, Walmart's net profit margin declined in but slightly improved in. The drop likely reflects rising supply chain and labor costs, while the partial recovery suggests better cost control.

3.2.2 Costco wholesale corporation

According to the chart, Costco's net profit margin remained strong and stable. Its membership model—focused on efficiency and low overhead—helped mitigate pandemic-related cost fluctuations.

3.2.3 Target corporation

Target experienced the largest margin drop in, likely due to high inventory and markdown-related losses after pandemic-driven overstocking. The recovery in suggests stronger pricing and inventory control.

The variation in net profit margins among Walmart, Costco, and Target from to highlights how distinct business models shape financial outcomes. Walmart's slight improvement reflects disciplined cost control but also reveals pressure from external factors like tariffs, which it partially absorbed to sustain its pricing strategy [6]. Costco's stable margin was supported by its membership-based model and high operational efficiency, allowing it to outperform competitors even during inflationary periods [7]. Target, despite facing rising expenses and inventory issues, managed to improve its gross margin through tighter operational oversight. These differences underscore the importance of internal strategy and cost structure in determining profitability within the grocery retail sector.

3.3. Comparison of Total Asset Turnover

Total Asset Turnover measures how efficiently a company uses its assets to generate income. It is calculated, total revenue divided by average total assets. A higher ratio indicates better use of resources and stronger operational efficiency (see Table 3).

Table 3. Total Asset Turnover Sheet

| | 2022 | 2023 | 2024 |
|------------------------------|------|------|------|
| Walmart Inc. | 2.34 | 2.51 | 2.62 |
| Costco Wholesale Corporation | 3.47 | 3.45 | 3.52 |
| Target Corporation | 1.97 | 2.05 | 2,10 |

3.3.1 Walmart Inc.

Walmart's asset turnover increased steadily over the three years. This improvement reflects strong supply chain efficiency and high inventory turnover in its large-scale retail operations.

3.3.2 Costco wholesale corporation

Costco consistently maintained the highest asset turnover, a result of its high-volume sales model, limited product lines, and fast-moving inventory. Its high efficiency demonstrates effective asset utilization throughout the period.

3.3.3 Target corporation

Target's asset turnover improved slightly year by year, suggesting gradual progress in inventory and store efficiency. However, it still lagged behind Walmart and Costco in overall asset utilization.

Over the to period, Costco consistently maintained the highest total asset turnover, reflecting its strong operational model. Walmart showed notable improvements year by year, whereas Target, though starting from a lower base, demonstrated gradual progress. These patterns were shaped in part by inventory and supply chain strategies adjusted in response to the pandemic. According to McKinsey & Company [8], companies that streamlined their logistics and adopted digital solutions were able to recover more quickly and make more effective use of their assets in the post-COVID environment.

3.4. Comparison of Equity Multiplier

The equity multiplier is a financial ratio that reflects a company's use of financial leverage. It is calculated by dividing total assets by total shareholders' equity. A higher equity multiplier suggests greater reliance on debt financing, while a lower multiplier indicates a more conservative capital structure (see Table 4).

Table 4. Equity Multiplier Sheet

| | 2022 | 2023 | 2024 |
|------------------------------|------|------|------|
| Walmart Inc. | 2.37 | 3.17 | 3.05 |
| Costco Wholesale Corporation | 2.75 | 3.11 | 2.95 |
| Target Corporation | 2.38 | 2.75 | 2.85 |

3.4.1 Walmart Inc.

Rarely does Walmart deviate from its strategy of scale-driven expansion, and its rising equity multiplier reflects just that. From 2.37 in 2022 to 3.17 in 2023, Walmart increased its reliance on debt to support growth. Indeed, this trend aligns with its pursuit of market share through aggressive investment in logistics and infrastructure. While this level of leverage is not excessive, it does point to a more capital-intensive financing approach than some of its peers.

3.4.2 Costco wholesale corporation

Costco's equity multiplier, by contrast, remained relatively stable—from 2.75 to 3.11—over the same period. As is often observed in firms with disciplined operations, this consistency reflects a balanced approach to debt financing. According to the the Corporate Finance Institute [9], such steadiness in financial leverage often signals strong internal controls and risk management. In fact, Costco's financial model thrives on predictability and operational rigor rather than debt-fueled expansion.

3.4.3 Target corporation

Only in recent years has Target shown a meaningful shift in capital structure. Its equity multiplier rose from 2.38 in 2022 to 2.85 in 2024, indicating growing dependence on debt. However, unlike Costco, Target appears to be using leverage to address short-term challenges, such as inventory recovery and store renovations. It should be noted, though, that while this strategy may support growth, it also increases the company's exposure to interest rate volatility and earnings risk.

Nowhere are differences in financial strategy more evident than in the equity multipliers of these three firms. Walmart's upward trend reflects its scale-first expansion model, while Costco's consistency underscores conservative risk management. Target, meanwhile, is increasing its financial leverage—perhaps necessarily—but with potential consequences. Clearly, equity structure is not merely a financial ratio, but a strategic signal of how each company balances growth with stability.

4. Development Recommendations

The DuPont-based financial analysis of Walmart, Costco, and Target from 2022 to 2024 revealed substantial differences in profitability, asset utilization, and leverage. To enhance financial resilience and long-term value creation in the grocery retail sector, three targeted recommendations are proposed

4.1. Optimize Profit Margins Through Product and Pricing Strategy

Not until retailers evaluate profitability at the SKU level can they fully understand where their margins are leaking. Walmart's consistently low net profit margins and Target's volatility point to weaknesses in category-level contribution. As Dhar and Hoch emphasize [9], fine-tuning product mix and simplifying assortments can significantly improve margin efficiency. Private-label expansion,

elimination of unprofitable SKUs, and dynamic pricing algorithms are therefore essential to improve bottom-line performance without sacrificing competitiveness.

4.2. Maintain Financial Stability Through Prudent Leverage

Seldom do firms benefit from aggressive debt accumulation during volatile periods. Costco's stable equity multiplier reflects a cautious capital structure, while Target's increasing leverage—from 2.38 in 2019 to 2.85 in 2023—raises questions about risk exposure. According to Lee and Huang [10], firms with tighter leverage controls experience fewer liquidity disruptions and enjoy greater flexibility in downturns. In fact, maintaining a moderate equity multiplier should be a strategic priority—especially when consumer spending patterns are uncertain.

4.3. Accelerate Digital and Data-Driven Operations

As is often the case in modern retail, those who lead in data integration tend to outperform in both efficiency and customer experience. Real-time inventory visibility, personalized promotions, and omnichannel fulfillment systems are no longer optional—they are critical to success. According to Sapient [11], digital integration not only boosts operational agility but also enhances margin through better targeting. Moreover, Pymnts reports that 65% of grocery retailers still lack real-time supply chain data, which limits decision-making and increases cost exposure. Investing in digital infrastructure is, therefore, not just beneficial, it's necessary [12].

5. Conclusion

This paper uses the DuPont analysis framework to evaluate the financial performance of Walmart, Costco, and Target between 2019 and 2023. By breaking down return on equity (ROE) into net profit margin, total asset turnover, and equity multiplier, the research aimed to uncover how strategic and operational differences affect financial outcomes. Not only did the three firms demonstrate contrasting financial structures, but they also responded differently to post-pandemic challenges. Walmart showed consistent asset efficiency yet struggled with low profitability. Costco maintained strong performance across all metrics through operational discipline and conservative leverage. Target, meanwhile, experienced high volatility, driven by shifts in inventory strategy and rising financial risk.

These findings point toward several actionable recommendations. First, profitability improvements must start at the product level—only by aligning category strategy with margin contribution can firms optimize performance. Second, maintaining prudent debt levels is essential to reducing risk exposure, especially in uncertain economic environments. Finally, accelerating digital integration and investing in real-time supply chain data will enable retailers to enhance responsiveness, control costs, and better serve evolving consumer demands. As the grocery sector grows increasingly competitive and data-driven, success will belong to those who balance margin, scale, and agility with equal precision.

References

- [1] Clough, R. Retail change: A consideration of the UK food retail industry, 1950–2010 (Doctoral dissertation). Middlesex University, 2002. Retrieved from: <https://repository.mdx.ac.uk/item/836qw>. Accessed May 20, 2025.
- [2] Miao, H. Walmart's business strategy and financial analysis based on Porter's five forces analysis model and SWOT. *Highlights in Business, Economics and Management*, 2023, 23, 1156–1163.
- [3] Nguyen, T. T. H. Wal-Mart's successfully integrated supply chain and the necessity of establishing the Triple-A supply chain in the 21st century. *Journal of Economics and Management*, 2017, 29(3), 103–117.
- [4] Dhar, S. K., & Hoch, S. J. Why store brand penetration varies by retailer. *Marketing Science*, 1997, 16(3), 208–227.

- [5] Lee, C., & Huang, Y. Debt leverage and adjustment costs under economic volatility. *International Review of Financial Analysis*, 2020, 71, 101117.
- [6] Deloitte. Retail industry outlook: Impact of COVID-19 on financial performance. Deloitte China, 2020. Retrieved from: <https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/consumer-business/deloitte-cn-cb-ccfa-survey-report-covid-19-zh-landscape-200319.pdf>. Accessed May 20, 2025.
- [7] MarketWatch. After Trump rages, Walmart says it will eat 'some' of the tariff costs. 2025. Retrieved from: <https://www.marketwatch.com/story/after-trump-rages-walmart-says-it-will-eat-some-of-the-tariff-costs-637af84c>. Accessed May 20, 2025.
- [8] Financial Times. Gold bars and \$5 chickens make Costco an inflation wave winner. 2024. Retrieved from: <https://www.ft.com/content/89a43ff3-1d6f-4110-b0c2-44d496194d23>. Accessed May 20, 2025.
- [9] Target Corporation. 2023 Annual Report. 2024. Retrieved from: <https://corporate.target.com/getmedia/eba4c76f-a33f-4f4c-9dce-683e907ac4e1/2023-Annual-Report-Target-Corporation.pdf>. Accessed May 20, 2025.
- [10] Corporate Finance Institute. Equity Multiplier – Guide, Examples, Financial Leverage Ratios. n.d. Retrieved from: <https://corporatefinanceinstitute.com/resources/valuation/equity-multiplier/>. Accessed May 20, 2025.
- [11] Publicis Sapient. The Future of Grocery: Bringing Digital Experiences to the Store. 2023. Retrieved from: https://www.publicissapient.com/insights/the_future_of_grocery_bringing_digital_experiences_to_the_store. Accessed May 20, 2025.
- [12] PYMNTS. 65% of grocery retailers lack real-time supply chain data. 2025. Retrieved from: <https://www.pymnts.com/news/retail/2025/65percent-of-grocery-retailers-lack-real-time-supply-chain-data/>. Accessed May 20, 2025.